

Federal Register

Wednesday
August 15, 1990

Part VI

Department of Agriculture

Animal and Plant Health Inspection
Service

9 CFR Part 3

Animal Welfare; Standards; Proposed
Rule

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Part 3

[Docket No. 90-040]

RIN 0579-AA20

Animal Welfare; Standards

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Proposed rule.

SUMMARY: We are proposing to amend the regulations for the humane handling, care, treatment, and transportation of dogs and cats, and nonhuman primates, by completely revising and rewriting those regulations. This proposed rule is a revision of a proposed rule previously published in the *Federal Register* on March 15, 1989. The revised proposed rule reflects our consideration of the approximately 10,700 comments received in response to that proposal, our experience in administering and enforcing the regulations, and our ongoing consultation with the U.S. Department of Health and Human Services and other interested agencies. The effect of this action would be to update the regulations, to make them more consistent with other Federal regulations concerning the handling, care, treatment, and transportation of these animals, and to comply with the amendments to the Animal Welfare Act (7 U.S.C. 2131, *et seq.*), enacted December 23, 1985. Rewriting the regulations is also intended to make them easier to understand, thereby increasing compliance and making them more effective.

DATES: Consideration will be given only to comments received on or before October 1, 1990.

ADDRESSES: To help ensure that your written comments are considered, send an original and two copies to Chief, Regulatory Analysis and Development, PPD, APHIS, USDA, P.O. Box 1839, Hyattsville, MD 20788. Please state that your comments refer to Docket No. 90-040. Comments received may be inspected at the APHIS Public Reading Room, Room 1141, U.S. Department of Agriculture, 14th Street and Independence Avenue SW., Washington, DC, 8 a.m. to 4:30 p.m., Monday through Friday, except holidays.

FOR FURTHER INFORMATION CONTACT: Dr. R.L. Crawford, Director, Animal Care Staff, Regulatory Enforcement and Animal Care, APHIS, USDA, Room 269,

Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782, (301) 436-8790.

SUPPLEMENTARY INFORMATION:

General Background and Statutory Information

The Animal Welfare regulations (the regulations) are contained in title 9 of the Code of Federal Regulations, chapter 1, subchapter A, parts 1, 2, and 3. Part 1 provides definitions of the terms used in parts 2 and 3. Part 2 sets forth the administrative and institutional responsibilities of regulated persons under the Animal Welfare Act (7 U.S.C. 2131 *et seq.*) (the Act). Part 3 provides specifications for the human handling, care, treatment, and transportation, by regulated entities, of animals covered by the Act. Subpart A contains the regulations concerning dogs and cats; subpart B contains the regulations concerning guinea pigs and hamsters; subpart C contains the regulations concerning rabbits; subpart D contains the regulations concerning nonhuman primates; subpart E contains the regulations concerning marine mammals; and subpart F contains the regulations concerning other warmblooded animals. The regulations are issued and enforced by the Animal and Plant Health Inspection Service (APHIS), of the United States Department of Agriculture (USDA), under authority of the Act, as amended.

On December 23, 1985, extensive amendments to the Act were enacted (see Pub. L. 99-198, "The Food Security Act of 1985.") Among other things, the Act directs the Secretary of Agriculture to promulgate standards to govern the humane handling, care, treatment, and transportation of animals by dealers, research facilities, and exhibitors, for exercise of dogs, and for a physical environment adequate to promote the psychological well-being of nonhuman primates. In order to comply with the amendments to the Act, APHIS has published revisions of parts 1 and 2 and has published a proposal to amend part 3, as discussed below.

Proposals to amend parts 1 and 2 of the regulations were published in the *Federal Register* on March 31, 1987 (52 FR 10292-10298, Docket No. 84-027, and 52 FR 10298-10322, Docket No. 84-010, respectively). We solicited comments for a 60-day period, ending June 1, 1987. The comment period was twice extended, ending on August 27, 1987. We received 7,856 comments, many of which stated that it was difficult to comment upon the proposals to amend parts 1 and 2 independently of our proposal to amend the standards in part 3. In response to comments, we published revised proposals on parts 1 and 2, along with a

proposed rule to amend subparts A, B, C, and D of part 3, on March 15, 1989 (54 FR 10822-10835, Docket No. 88-013; 54 FR 10835-10897, Docket No. 88-014; and 54 FR 10897-10954, Docket No. 87-004, respectively).

We solicited comments on the interrelationship of parts 1 and 2 with part 3 for a 60-day period, ending May 15, 1989. Approximately 5,600 comments, received or postmarked by that date, were considered in preparing final rules for parts 1 and 2. (Any that also pertained to part 3 were considered as responding to the proposal to amend part 3.) These final rules to amend parts 1 and 2 were published in the *Federal Register* on August 31, 1989 (54 FR 36112-36123, Docket No. 89-130, and 54 FR 36123-36163, Docket No. 89-131, respectively).

Most of our proposal with regard to part 3 dealt with revisions to the standards, based on our experience enforcing the regulations. We also proposed certain significant additions to the regulations, based on our mandate under the 1985 amendments to the Act. For example, we made significant additions to the regulations, regarding the exercise of dogs and regarding a physical environment necessary to promote the psychological well-being of nonhuman primates. We solicited comments on the proposal to amend part 3 for a 120-day period, ending July 13, 1989. A total of 10,686 comments were received in time to be considered. Included among the recommendations we received in response to the proposed rule were those submitted by the U.S. Department of Health and Human Services (HHS), with whom we have continued our ongoing consultation. Of the comments received, 623 were from dealers and exhibitors, 2,890 were from the research community, and 7,173 were from members of the general public. We included comments received from humane societies and groups representing the public in the areas of animal welfare and animal rights with comments received from the general public. Of the total number of comments received, the overwhelming majority were in response to our proposed changes regarding subparts A and D.

Upon review of the comments regarding subparts B and C, we determined that in general our proposed revisions of those subparts were appropriate, with some minor modifications. On July 16, 1990, we published a document making final the proposed amendments to part 3 that pertain to subparts B and C (55 FR 28879-28884, Docket No. 89-175). However, we believe that because of the

nature of the comments received in response to our proposed amendments regarding subparts A and D, and on our ongoing consultations with other Federal agencies, it is appropriate for us to make certain major modifications to our March 15, 1989, proposal, and to issue a revised proposal regarding those subparts. These changes, discussed below, have been incorporated in this revised proposed rule.

Comments raising objections or suggesting changes to the proposed rule are discussed below in this supplementary information. Due to the length of this document and the scope of the issues addressed, subheadings are provided in the supplementary information to guide the reader through the material. Section numbers are used in the subheadings wherever possible to further assist the reader. We have made a number of changes to our March 15, 1989, proposal in this revised proposed rule. Those changes are explained in the supplementary information below. We continue to believe that the remaining provisions are necessary to ensure the health and well-being of the animals in question, and we have included these remaining provisions in this revised proposal without change, except to make certain nonsubstantive wording changes for clarification.

In our discussion of the comments received, we refer both to the proposed rule published March 15, 1989, and to this revised proposed rule. In order to assist the reader in distinguishing between these two documents, we use the terms "proposed," "proposal," or "original proposal" when referring to the March 15, 1989, proposed rule. We use the terms "revised proposal" or "revision" when referring to this revised rule. When referring to the existing regulations in 9 CFR part 3, we refer to the "current regulations."

For purposes of discussion, when we refer in this document to our proposed changes to part 3, we will be referring only to the proposed changes to subparts A and D. Additionally, various provisions in this revised proposal indicate that specified functions will be carried out by the Administrator. It should be noted that the regulations define "Administrator" as meaning the Administrator of APHIS, or any other APHIS official whom the Administrator delegates to act in his stead.

Consultation and Cooperation With Other Federal Departments, Agencies, or Instrumentalities

The amendments to the Act direct the Secretary of Agriculture to

consult and cooperate with other Federal departments, agencies, or instrumentalities concerned with the welfare of animals used for research, experimentation or exhibition, or administration of statutes regulating the transportation in commerce or handling in connection therewith of any animals when establishing standards pursuant to section 2143 of this title and in carrying out the purposes of this chapter.

(Section 1757, 99 Stat. 1649, Pub. L. 99-198, amending 7 U.S.C. 2145(a))

Accordingly, we consulted with the United States Department of the Interior, U.S. Fish and Wildlife Service (USFWS), which regulates transportation of wild birds and animals into the United States.

The amendments also specifically direct the Secretary of Agriculture to "consult with the Secretary of Health and Human Service prior to issuance of regulations." (See section 1757, 99 Stat. 1649, Pub. L. 99-198, amending 7 U.S.C. 2145(a).) The Department of Health and Human Services, through the Public Health Service (PHS), National Institutes of Health (NIH), currently issues guidelines on the care and use of animals studied in biomedical research. The animals include dogs and cats, guinea pigs and hamsters, rabbits, and nonhuman primates. These NIH guidelines are contained in a document entitled "Guide for the Care and Use of Laboratory Animals" (NIH Guide or Guidelines).¹ The NIH Guide is widely accepted by scientific institutions as a primary reference on animal care and use. Compliance with the NIH Guide is not mandatory except to obtain NIH funding, but most research laboratories in the United States do comply. While the Animal Welfare Act and regulations address a broader range of activities and facilities than the NIH Guide, Congress' intent, as expressed in the legislative history, in requiring consultation with HHS is to ensure that, whenever possible, the regulations and the NIH Guidelines are consistent:

The Conferees expect the Secretary of Agriculture to have full responsibility for enforcement of the Animal Welfare Act. However, the Conferees also recognize that a portion of the nation's research facilities fall under regulation from more than one agency.

¹ The NIH Office for Protection from Research Risks publishes another document called the "Public Health Service Policy on Humane Care and Use of Laboratory Animals," under authority of the Health Research Extension Act of 1985 (Pub. L. 99-158, November 20, 1985). However, the guidelines in that document concern mainly the use of tranquilizers and other drugs on animals being used in research, appropriate pre- and post-surgical veterinary care for animals being used in research, and the organization and operation of animal care committees. These subjects are not covered in this proposal, as we therefore do not discuss these NIH requirements in this document.

While the legislative mandate of each agency is different, and they may regulate different aspects of animal care, it is hoped that the agencies continue an open communications to avoid conflicting regulations wherever possible or practice. [sic]

(See Conference Report, "Congressional Record" of December 17, 1985, at page H12422.)

We have attempted in these proposed regulations to satisfy that intent, while at the same time being mindful of our responsibility to provide for the humane care, handling, treatment and transportation of various animals. To achieve this goal, we consulted extensively with NIH representatives concerning standards for the humane care, handling, treatment, and transportation of dogs and cats, guinea pigs and hamsters, rabbits, and nonhuman primates. We reviewed our existing regulations in conjunction with the NIH Guidelines. In addition, we considered comments raised by member agencies of the Interagency Research Animal Committee, which is comprised of Federal agencies that conduct research using animals. We also consulted with experts and professional organizations and sought their recommendations on appropriate standards to accomplish our goal. After considering all this information, we proposed extensive revisions to the regulations in 9 CFR part 3, subparts A, B, C, and D. In many cases, we proposed regulations substantially identical to current NIH Guidelines. That is because, in these cases, we believe the NIH Guidelines are appropriate and adequate to provide for the humane care, handling, treatment, and transportation of the animals in question. In other cases, we proposed to adopt different standards. In this revised proposal, we will discuss proposed changes on a subpart-by-subpart basis.

General Comments

Many commenters expressed general support for the proposed provisions; and for more stringent regulations in general. Several commenters stated that they favored more specific, rather than general standards. A very large number of commenters supported the proposed provisions that would establish requirements for increased space for animals. A very large number of commenters also supported exercise for laboratory animals.

Conversely, a very large number of commenters opposed more stringent regulations, and part 3 in general. Many commenters recommended that no changes be made to the current regulations. A very large number of

commenters stated that the proposed standards for part 3 exceed statutory authority and are inconsistent with Congressional intent. A large number of commenters asserted that the proposed regulations go beyond ensuring the humane care and use of animals. In this revised proposal, as in the original proposal, APHIS's statutory authority for the proposed regulatory amendments is set forth in the supplementary information, under the headings "General Background and Statutory Information" and "Statutory Authority for This Proposed Rule." Based on the statutory authority set forth, we believe that ample authority exists for this revised proposal.

A large number of commenters opposed exercise requirements for animals on the grounds that they would be so expensive they would be prohibitive. While we are acutely aware that the economic impact of regulatory changes is of great importance to regulated entities, we do not consider dismissal of exercise requirements a viable option. We believe that such requirements are necessary, both for the well-being of the animals and to meet our statutory obligations. However, we believe that certain of the modifications we have included in this revised proposal, discussed below in this supplementary information, will meet the needs of the animals in question, and will in certain cases reduce the potential economic impact on regulated entities.

Many commenters urged a close correlation between the proposed regulations and NIH Guidelines. A small number of commenters stated that APHIS failed to coordinate with the Secretary of HHS in issuing the proposed rule. A large number of commenters stated that the proposed standards would radically alter established PHS and NIH policies. Several commenters stated that the NIH Guide is not a substitute for animal welfare standards and should be used only to assist institutions in animal care, not to replace compliance with animal welfare regulations. Many more commenters asserted that the legislative history of the 1985 amendments to the Act indicates that APHIS's authority is limited to promulgating regulations that are consistent with the guidelines contained in the PHS Policy. As noted in this supplementary information in Footnote 1, the PHS Policy is not directly relevant to the standards in part 3. However, we believe it is appropriate to address in this preamble the relationship between the regulations and NIH Guidelines. Section 15(a) of the

Act requires that the Secretary of Agriculture consult and cooperate with other Federal agencies in establishing standards, and consult with the Secretary of HHS before issuing regulations (7 U.S.C. 2145(a)). We have continued the consultation described in the supplementary information accompanying the original proposal (54 FR 10898), in an effort to coordinate our requirements wherever it is consistent with our statutory mandate to do so. We believe that this revised proposal resolves all of the issues raised by HHS in response to our original proposal.

A small number of commenters urged that we consider allowing research facilities to comply with either the Animal Welfare regulations, the PHS Policy, Food and Drug Administration regulations, or the American Association for the Accreditation of Laboratory Animal Care (AAALAC) accreditation standards. This is not a viable option. All those who are subject to the Act must comply with its provisions. That also includes compliance with regulations and standards that we are required to promulgate. Those who are regulated are not provided with the option to choose the regulations that would apply to them, and we do not have the authority to offer such a choice.

A large number of commenters stated that it is not scientifically valid to adopt as Federal regulations all of the elements currently proposed to be adopted from the NIH Guidelines. In some cases, the proposed standards that were based on NIH Guidelines have been modified in this revised proposal. These changes are discussed throughout this supplementary information. In the remaining cases, specifically minimum space requirements for cats and nonhuman primates, we have found from our experience enforcing the regulations that the standards we have proposed are necessary minimum standards for ensuring the well-being of the animals in question.

A very large number of commenters stated that the proposed regulations are not supported by scientific documentation, that they are arbitrary and capricious, and that they provide no evidence either that the existing standards are inadequate or that the proposed standards will be of benefit to the animals' welfare. Many commenters recommended that the proposal be rewritten to reflect available scientific information and current professional consensus. A smaller number of commenters expressed the opinion that APHIS does not have the technical competence to promulgate the proposed

standards. Under the Act, we are required, among other things, to establish standards to provide for the exercise of dogs and psychological well-being of nonhuman primates.

Predictably, these two areas generated the most controversy over how existing scientific data should be interpreted in establishing regulations. In our proposal, we set forth provisions designed to meet our statutory mandate, as well as setting forth other proposed changes to the regulations, based on over 20 years of enforcing the regulations, and on additional evidence available to us. We then invited comments and analysis of those provisions. We have carefully reviewed all of the information and recommendations we received in response to our proposal. Included in this information, in many cases, was persuasive evidence that certain modifications to our original proposal were warranted. We have accordingly made such modifications in this revised proposal, as discussed below. We believe that this revised proposal incorporates the most compelling scientific data available to us. We are now providing the public the opportunity to review and comment on the provisions we are proposing. We will consider all comments received, and will make whatever changes are warranted in developing a final rule.

A small number of commenters recommended that separate standards be established for research, dealer, and exhibitor facilities. A small number of commenters recommended further that separate standards be established for different types of facilities within those three categories. While provisions do exist in the regulations to ensure that the standards in part 3 do not interfere with approved research, in general we do not believe that separate standards for different types of facilities would be appropriate. The Act requires that we establish minimum standards for the humane care and well-being of animals. The fact that the current and proposed standards are minimum inherently makes them applicable to each type of facility.

A large number of commenters stated in general that the scientific community is highly motivated to maintain the best possible laboratory animal care, because it is essential for human reasons and to ensure productivity and accuracy. We agree that humane treatment of animals used in research promotes both the well-being of the animals and the research value of the activities conducted. The standards set forth in part 3 of the regulations are minimum standards necessary for the

well-being of animals housed, held, or maintained at any of the various categories of regulated entities. We encourage and applaud treatment of animals according to standards in excess of the minimum. However, as discussed above, we do not consider it appropriate or warranted to establish a separate set of standards for each type of regulated entity.

Many commenters asserted that the proposed standards consisted of rigid engineering standards, rather than performance standards, and that such rigid standards are contrary to the directives of Executive Order No. 12498. Many commenters stated that the proposed standards would interfere with research due to their rigidity, and would not allow the flexibility and innovations necessary for the optimal care and treatment of animals. A number of commenters recommended that each section of the proposed regulations begin with a statement of the objective to be achieved, rather than the method of achieving it, to allow for flexibility and innovation. In proposing the standards in our original proposal, we attempted to set forth performance standards where we considered them appropriate. We then invited comments on each of the standards proposed. Based on the comments received, we have made, in this revised proposal, certain significant modifications. We have made these modifications with the goal of establishing performance standards that allow for flexibility and innovation, that are enforceable, and that ensure the health and well-being of the animals in question.

We do not agree that the regulations will interfere with research. The regulations provide for departures from the standards and regulations at research facilities, if specified and justified in the proposal to conduct the activity and approved by the facility's Committee (§ 2.38(k)(1)).

A small number of commenters expressed concern that the proposed regulations would result in research being conducted overseas, due to the added burdens and expense imposed upon the research community. A number of commenters stated that, by impeding biomedical research in the United States, the proposed regulations would permit our competitors to overtake and surpass the lead we have enjoyed in biotechnology. Many commenters also stated that many of the proposed provisions would be used to eliminate animals from biomedical research. Several commenters stated that cost of compliance is not a Congressionally

mandated consideration in the adoption of new regulations.

We do not believe a significant amount of research activities would be conducted in countries other than the United States as a result of the regulations set forth in the revised proposal. We also do not perceive that Congress of HHS would provide Federal funds for research conducted abroad to avoid the requirements of the Animal Welfare regulations. Similar concerns were raised in 1966 and 1967 when the Act was first enacted, and regulations were promulgated to implement it. History has shown that these concerns were not borne out. To the contrary, tremendous advances in human and animal health have been made possible through continued support for biomedical research. The 1985 amendments to the Act impose specific requirements upon research facilities. Some costs will necessarily be associated with these changes. In enacting the amendments, Congress specifically found that the use of animals is instrumental in certain research and education (7 U.S.C. 2131(b)). Congress also determined that the benefit to society of providing for the humane care and use of animals in research justifies its attendant costs. We believe that the provisions of this revised proposal would effectuate the intent of Congress without imposing an unnecessary, unreasonable, or unjustified financial burden.

A large number of commenters stated that APHIS failed to show a rational connection between the proposed rule and the Agency record. We have been charged with the responsibility of administering and enforcing the Animal Welfare Act, and implementing regulations, since the Act was enacted in 1966. The proposed amendments to the regulations reflect our many years of experience in implementing the Act and additional expert information available to us. We have determined where additional regulatory requirements are needed to ensure that the safeguards intended by the Act are provided and to promote animal welfare. Based on information submitted in response to our request for comments regarding the proposed rule, we have revised certain of the provisions in the proposal. We believe that the provisions of this revised proposal, if implemented, would assist us in enforcing the Act and in preventing circumvention of its requirements.

Many commenters stated that the proposed regulations contain too many "loopholes" that allow facilities to interpret or circumvent standards, even

though this is what Congress intended to avoid with its 1985 amendments to the Act. Throughout this rulemaking process, we have remained cognizant that section 13(a)(6) of the Act prohibits the Secretary from interfering with research design or the performance of actual research. Accordingly, the regulations provide to research facilities exceptions from the standards in part 3, when such exceptions are specified and justified in the proposal to conduct the activity.

Many commenters addressed in general the minimum space requirements set forth in the proposal. Of the commenters addressing these provisions, approximately half stated that the proposed requirements were insufficient. The other half stated that the proposed provisions would increase the space requirements in excess of what is required. The proposed minimum space requirements were based on analysis of a number of factors, including our experience enforcing the regulations, expert advisory recommendations, and consultation with other Federal agencies. The proposed requirements were based on the best information available to us. Upon review of the information submitted to us in response to the proposed rule, and based on our ongoing consultation with other Federal agencies, we have revised certain provisions in the proposed rule regarding minimum space requirements. We believe the revised provisions are appropriate to ensure the health and well-being of the animals contained in the enclosures.

One commenter requested that the proposed regulations allow for the use of existing cages until they need replacing. The commenter recommended that upon replacement of cages, it be required either that the replacement cages comply specifically with the amended regulations, or that they be subject to the judgment of the attending veterinarian. We are making no changes based on these comments. In the revised proposal, we are proposing to amend the current provisions regarding space requirements for cats and for nonhuman primates, and to add height requirements for primary enclosures for dogs. Based on our experience enforcing the regulations, we believe that the well-being of these animals requires that these amendments be implemented as soon as practically possible. We therefore do not believe it would be appropriate to delay such implementation until existing primary enclosures need replacement.

A large number of commenters stated generally that the proposed regulations would unduly restrict the exercise of professional judgment by the attending veterinarian and other laboratory animal professionals. Many commenters expressed concern that the proposed regulations would have an adverse effect on animal welfare. Upon review of the comments that addressed specific provisions in the proposed regulations, we believe that it would be appropriate to modify a number of those provisions to allow more latitude to the attending veterinarian, to help ensure that the needs of individual animals are met. Each of these modifications, and the comments addressing the provisions in question, are discussed below in this supplementary information.

Several commenters expressed concern that the proposed regulations would be unenforceable. We are keenly aware from our more than 20 years of implementing the regulations of the critical importance of enforceable regulations. In developing the proposed regulations, we took great care to determine that what was being proposed would be enforceable. We therefore do not anticipate a problem with enforceability.

A large number of commenters stated generally that the proposed standards would result in an increased risk of disease and injury to both humans and animals. We believe that the proposed regulations should pose little increased risk if proper medical, health, husbandry, and safety procedures are followed. Whatever risk might exist would be further minimized by certain of the changes we are making in this revised proposal, discussed in the supplementary information below, to allow for greater professional judgment as to the health and safety needs of individual animals, breeds, and species.

A number of commenters stated in general that the proposed regulations should specifically define "veterinary care," with regard to what are accepted or common veterinary practices. We do not believe that such a definition is necessary or practical. The type of care necessary will vary from situation to situation. Further, the most appropriate veterinary care for a given situation periodically changes due to advances in medicine and science. We believe that whether veterinary care is adequate can be determined according to commonly accepted practices and, for enforcement purposes, according to expert witnesses.

The original proposal regarding amendments to part 3 was published March 15, 1989. A very large number of commenters requested that the final rule based on the proposal be published in

time to allow for enforcement of the amended regulations by December 31, 1989. Amendment of the current regulations is a high priority for the Department. However, we do not believe that accelerating the rulemaking process to meet the timetable requested by the commenters would have been in the best interests of either the animals in question or the regulated entities. Following publication of the proposal, comments from the public were accepted until July 13, 1989. Approximately 10,700 comments were received. We take seriously our responsibility under the Administrative Procedure Act to review and address each comment received. Based on that review, on our ongoing review of current research data, and on our ongoing consultation with other Federal agencies, we have formulated the provisions of this revised proposal, upon which we are inviting public comment. By following this rulemaking process, we believe that the end result will be regulations that better meet the needs of the animals in question.

A small number of commenters stated that the regulations are discriminatory against research, and should apply equally to other areas, such as farms, pet stores, etc. The regulations in subparts A and D apply to those entities specified under the Act as being subject to its provisions. Certain retail stores which sell pet animals are subject to the Act and the regulations. With regard to farm animals, on April 5, 1990, we published in the *Federal Register* a notice of our intent to begin regulating certain farm animals under the Act (55 FR 12630-12631, Docket No. 89-223). We are considering requests from the public to begin regulating other animals under the Act, and will take whatever action is appropriate.

A small number of commenters stated that the proposed regulations were written in a manner not understandable by the general public, thereby making comments on them difficult, if not impossible. Based on the great number of comments we received addressing both specific and general provisions set forth in the proposal, we believe that in general the public found the proposed provisions, understandable. Those areas of the proposed regulations that were most complex—i.e., exercise requirements for dogs and primary enclosure requirements for nonhuman primates—have been modified and simplified. Additionally, as noted below throughout this supplementary information, we have made certain changes to the proposal for the purposes of clarity.

A number of commenters recommended that temperatures (centigrade degrees), linear dimensions (centimeters), and weights (pounds) be rounded to whole number, asserting that the mathematical decimal points in the regulations are not practical. In most cases in the proposed regulations, units of measurement have been carried to one decimal point to allow for correlation between the United States customary system of measurement and the metric system. We believe that this correlation is necessary for accuracy and do not believe that carrying units of measurement to one decimal point would create practical problems.

Several commenters stated that the phrasing of the proposed regulations indicated application to non-animal areas. In certain cases, such as housekeeping standards, application to non-animal areas was intentional, because the condition of a premises can have an impact on the animals housed at the facility. In certain other cases, such as temperature requirements in housing facilities, qualifying language is included to make it clear that the standards need be met only when animals are present. We believe that the remainder of the proposed provisions express their intent clearly as to which areas of a facility, conveyance, or operation would be affected.

A number of commenters expressed concern that the proposed rules would adversely affect proper sanitation, disease, and vermin control. In general, we believe that the proposed regulations would result in improved levels of sanitation, disease, and vermin control. In those several areas where proposed provisions for the well-being of the animals might require increased cleaning, sanitization, and housekeeping efforts on the part of regulated facilities, we believe that such increased efforts are warranted by the attendant benefits to the animals.

Several commenters opposed the use of private groups' input in developing the proposed regulations. We do not share the commenters' viewpoint. The Administrative Procedure Act (APA) sets standards we must follow in carrying out rulemaking. The APA in no way prohibits information gathering from outside sources in developing a proposed regulation. In fact, soliciting information from outside sources is a recommended way of ensuring that affected parties have the opportunity to provide relevant information prior to development of a proposed rule. We have found the information we received from outside sources valuable in

compiling the latest scientific data on animal welfare.

A very large number of commenters stated that chimpanzees are currently being used for painful laboratory research of dubious scientific value, and therefore suffering psychological and physical torment. While this issue is not within the scope of the standards proposed for Subparts A and D, we believe that the extraordinary volume of comments with regard to it warrants our addressing these comments.

As we stated in the August 31, 1989, final rule regarding part 2 and limited portions of part 3 (54 FR 36139, Docket No. 89-131), in amending the Animal Welfare Act, Congress explicitly acknowledged that "the use of animals is instrumental in certain research and education for advancing knowledge of cures and treatment for diseases and injuries which afflict both humans and animals; * * * (7 U.S.C. 2131). At the same time, however, Congress determined that alternative testing methods that do not require animals are being developed that are faster, less expensive, and more accurate, and that eliminating or minimizing unnecessary duplication of experiments on animals can result in more productive use of Federal funds (7 U.S.C. 2151). In response to public concern for laboratory animal care and treatment, the 1985 amendments to the Act imposed restrictions on the use of animals, so that pain and distress will be minimized whenever possible, alternatives to painful procedures will be considered, unnecessary duplication of experiments will be avoided, withholding of pain-relieving drugs will be limited to when scientifically justified, and adequate veterinary care will be provided. The 1985 amendments also prohibit using an animal in more than one major operative experiment unless necessary for scientific purposes or under other special circumstances (7 U.S.C. 2143(a)). The final regulations we published on August 31, 1989, reflected the determination of Congress that while biomedical research using animals is necessary, regulations to ensure that such research is conducted responsibly and humanely are also necessary.

A large number of commenters stated that APHIS failed to incorporate the recommendations submitted by a national research association. We reviewed all information submitted to us carefully in developing the proposed rule. The information we received represented a wide range of data and opinions, and a variety of different perspectives. From this information, we developed a proposal that included

what we considered necessary minimum standards to meet the needs of the animals regulated. Based on the information we have received since publication of the proposed rule, we have modified that proposal. We are now soliciting comments on this revised proposal, and, after review of the comments received, all make whatever changes are appropriate.

A number of commenters stated that records of dog exercise and primate environmental enrichment should be made available to the Institutional Animal Care and Use Committee at research facilities, to the Department, and to the general public. The exercise and environmental enrichment recordkeeping requirements included in the proposed rule have been replaced in this revised proposal by requirements for operating procedures to meet the required ends. These requirements are discussed in more detail in this supplementary information, under the headings "Exercise and Socialization for Dogs," and "Environment Enhancement to Promote Psychological Well-Being." While such procedures at research facilities would be subject to APHIS review, we do not believe it is necessary for proper enforcement that they also be available to the general public.

A number of commenters recommended that the proposed regulations include an index to allow easier retrieval of information. As discussed above, we have made a number of changes to the proposed rule to simplify and clarify it, and believe that the revised proposal is understandable as written. We do not believe it is necessary to include an index in the regulations. Each of the subparts is formatted according to the types of animals involved. Within each subpart, the contents of each section are indicated by a section heading. These headings are set forth in a table of contents at the beginning of each subpart. We believe that this format provides adequate reference to the contents of the regulations.

Subpart A—Dogs and Cats

Regulations for humane handling, care, treatment, and transportation of dogs and cats are contained in 9 CFR part 3, subpart A. These regulations include minimum standards for handling, housing, feeding, watering, sanitation, ventilation, shelter from extremes of weather and temperature, veterinary care, and transportation.

It should be noted that the proposed regulations apply only to live dogs and cats, unless indicated otherwise.

In our March 15, 1989, proposed rule, we proposed to revise and rewrite the

current regulations based on our experience administering them. We also proposed to amend our regulations to add requirements for the exercise of dogs. This is specifically required by the 1985 amendments to the Act. (See section 1752, 99 Stat. 1645, Pub. L. 99-1988, amending section 13 of the Act). We discuss each topic covered in our proposed regulations below.

A number of commenters who responded to our proposed rule addressed issues relevant to subpart A as a whole. Several of these commenters stated that it is inappropriate to have the same regulations for both dogs and cats, because of the extreme behavioral differences between the species. We do not agree that the difference between the two species necessitate two entirely different sets of standards. Basic minimal animal husbandry and care requirements are similar for both species. In those cases where species-specific needs do exist for dogs and cats, separate provisions appropriate to each species are included in both the current and the proposed regulations.

A small number of commenters recommended that adequate provisions for exercise and socialization be provided for cats as well as dogs. One of our specific obligations under the 1985 amendments to the Act was to establish requirements for the exercise of dogs. In response to that mandate, we included such provisions in our proposal. Based on the information we have reviewed, we do not feel it is necessary or appropriate to require exercise and socialization for cats.

One commenter recommended that we seek the advice of experts on domestic cats when promulgating new regulations. In developing the proposed regulations, we received and analyzed information from many expert sources, including veterinary professionals, the scientific community, and organizations advocating the humane treatment of animals. We also relied in great measure on more than 20 years of enforcement of the Animal Welfare regulations. The provisions we are proposing are based upon the best information available to us regarding the necessary minimum standards for the humane handling, care, and treatment of cats and dogs.

Housing Facilities and Operating Standards

Current §§ 3.1 through 3.3 provide requirements for facilities used to house dogs and cats. Current § 3.1, "Facilities, general," contains regulations pertaining to housing facilities of any kind. It is followed by current § 3.2, "Facilities, indoor," and § 3.3, "Facilities, outdoor."

In our March 15, 1989, proposed rule, we proposed to amend these sections to provide for an environment that better promotes the health, comfort, and well-being of dogs and cats. We also proposed to add sections that provide regulations specifically governing two other types of facilities used to house dogs and cats—sheltered housing facilities, and mobile or traveling housing facilities. The term "sheltered housing facility" is defined in part 1 of the regulations as "A housing facility which provides the animals with shelter; protection from the elements; and protection from temperature extremes at all times. A sheltered housing facility may consist of runs or pens totally enclosed in a barn or building, or of connecting inside/outside runs or pens with the inside pens in a totally enclosed building." The term "mobile or traveling housing facility," also included in part 1, is defined as "a transporting vehicle such as a truck, trailer, or railway car, used to house animals while traveling for exhibition or public education purposes."

Some of the regulations we proposed for housing facilities are applicable to housing facilities of any kind. As in the current regulations, we proposed to include these standards of general applicability in one section, proposed § 3.1, that would also include many of the provisions in current § 3.1. Additionally, we proposed amendments to the current regulations that are specific to particular types of housing facilities, and included those provisions in separate sections of the proposed regulations. In some cases where the current regulations would have been unchanged in substance, we made wording changes to clarify the intent of the regulations.

Housing Facilities, General

Housing Facilities: Structure; Construction—Section 3.1(a)

We proposed in § 3.1(a) to require that housing facilities for dogs and cats be designed and constructed so that they are structurally sound. We proposed that they must be kept in good repair, and that they must protect the animals from injury, contain the animals securely, and restrict other animals and unauthorized humans from entering. A number of commenters addressed the issue of restricting the entrance of unauthorized humans, stating that the responsibility for maintaining adequate security at a facility belongs to the facility, and not to the Department of Agriculture. While we agree that, to a certain degree, the entrance of unauthorized humans is a general

security issue, we believe that the presence of such individuals could pose the risk of injury to the animals housed in the facility. Because the well-being of the animals would be at stake, we are making no changes to our proposal based on the comments.

Housing Facilities: Condition and Site—Section 3.1(b)

In proposed § 3.1(b), we proposed to add the requirement that a dealer's or exhibitor's housing facilities be physically separated from any other business. When more than one entity maintains facilities on the premises, the increased traffic, equipment, and materials in proximity to the animals can be detrimental to the animals' well-being. Also, in cases where more than one entity maintains animals on a premises, it can be difficult to determine which entity is responsible for which animals and for the overall conditions. To avoid this difficulty, we proposed to require that housing facilities other than those maintained by research facilities and Federal research facilities be separated from other businesses. We proposed that this could be done by using a security fence or by conducting each business in a separate building. We did not propose to impose this requirement on research facilities, because they are often part of a larger sponsoring establishment, such as a university or pharmaceutical company, and responsibility for animal and site conditions rests with that establishment. Therefore, we have not encountered the enforcement difficulties noted above with respect to research facilities.

The comments that addressed these provisions in proposed § 3.1(b) were varied. Some supported the provisions as written. Some opposed the provisions in their entirety. Several commenters suggested amendments to the provisions to allow businesses to occupy the same building as long as the respective businesses' animals were kept separate. Others recommended requiring the separation of the business from the owner's dwelling. Several commenters recommended nonsubstantive wording changes to the provisions.

We believe that the provisions in proposed § 3.1(b) regarding the separation of animal housing facilities from other businesses are necessary. We believe the provisions as proposed provide a practical solution to the problems discussed above, without addressing issues of building construction that do not concern the health and well-being of the animals within. Therefore, we are making no changes to those provisions in this revised proposal.

We also proposed in § 3.1(b) to require that housing facilities and areas used for storing animal food and bedding be kept free of any accumulation of trash, waste material, junk, weeds, and discarded material, in order to prevent an unsanitary condition and problems with diseases, pests, and odors. The need for orderliness applies particularly to the areas where animals are maintained in the housing facilities. Under our proposal, these areas would have to be kept free of clutter, including equipment, furniture, and stored material, and materials not necessary for proper husbandry practices.

A number of commenters addressed these provisions. Some supported the provisions as written. A number of commenters recommended that we eliminate the proposed prohibition of "trash" and "junk." We continue to believe that such materials pose the danger of harboring and fostering disease, vermin, and other pests, and are making no changes to our proposal based on these comments. Many commenters were concerned that our prohibition of "clutter" would prohibit equipment and material actually used in the day-to-day operation of the facility. It was not our intent to prohibit materials that are used on a regular basis from being kept in animal areas, and we have made revisions to our proposal to address that issue. In this revised proposal we are removing the examples of acceptable materials and equipment we provided in the proposal to avoid giving the impression that the items listed are the only ones that may be kept in animal areas. We are also providing in this revised proposal that necessary "equipment" may be kept in animal areas, and that materials, equipment, and fixtures necessary for research may be kept in such areas. Additionally, in order to clarify our intent with regard to the storage of cleaning materials that are necessary for proper husbandry, we are adding a provision to proposed § 3.1(e) to specify that toxic materials stored in animal areas must be stored in cabinets, but may not in any case be stored in food preparation areas.

Some commenters took issue with our prohibition of weeds in the housing facility, stating that weeds are not necessarily detrimental to the health and well-being of animals. We are making no changes to our proposal with regard to weeds. While weeds themselves may not be detrimental, they interfere with such necessary practices as cleaning and rodent control.

Housing Facilities: Surfaces; General Requirements—Sections 3.1(c) (1) and (2)

We included in proposed § 3.1(c) requirements concerning housing facility surfaces that are common to all types of facilities. We proposed to include requirements specific to particular types of facilities in separate sections. In § 3.1(c)(1), we proposed to require that the surfaces of housing facilities either be easily cleaned and sanitized, or be removable or replaceable when worn or soiled. These provisions also applied to houses, dens, and other furniture-type fixtures or objects within the facility.

Proposed § 3.1(c)(1) also required that any surfaces that come in contact with dogs and cats be free of jagged edges or sharp points that might injure the animals, as well as rust that prevents the required cleaning and sanitization. Because we recognize that as long as water is used to clean animal areas, metal parts will rust, we proposed to allow rust on metal surfaces, as long as it does not reduce structural strength or interfere with proper cleaning and sanitization.

A number of commenters specifically supported the standards in proposed § 3.1(c)(1) as written. A number of commenters stated that our standards seemed to prohibit the presence of rust. It was our intent to provide that rust would become unacceptable only when it prevented cleaning and sanitization or affected the structural strength of a surface. To further clarify this intent, we are proposing to prohibit "excessive" rust that causes such problems.

We are continuing to propose in § 3.1(c)(2) to require that all surfaces be maintained on a regular basis and that surfaces that cannot be easily cleaned and sanitized be replaced when worn or soiled.

Housing Facilities: Surfaces; Cleaning—Section 3.1(c)(3)

We proposed in § 3.1(c)(3) to require that hard surfaces that come in contact with dogs or cats be cleaned daily and sanitized at least every 2 weeks, and as often as necessary to prevent any accumulation of excreta and disease hazards. Proposed § 3.1(b) also provided for various methods of sanitizing primary enclosures and food and water receptacles. Because these methods are effective in general for sanitization of hard surfaces that cats and dogs come in contact with, any of them could be used for the sanitization required by § 3.1(c). We proposed that floors made of dirt, sand, gravel, grass, or other similar material would have to be raked and spot-cleaned daily, since sanitization is

not practicable, and the flooring material would have to be replaced if raking and spot-cleaning were not sufficient to eliminate odors, diseases, pests, insects, or vermin infestation. We proposed that all other surfaces would have to be cleaned daily and sanitized when necessary to satisfy generally accepted professional and husbandry practices.

A number of commenters specifically supported the provisions of proposed § 3.1(c)(3) as written. Commenters were divided on whether surfaces other than hard surfaces should be allowable in housing facilities. While a small number specifically supported the use of such alternative surfaces, others opposed their use, stating that floors such as dirt, sand, and gravel cannot be adequately sanitized. We are making no changes to our proposal based on these comments. While it is difficult or impossible to use standard sanitization procedures on such surfaces, it is relatively simple to replace specific areas as needed.

A large number of commenters addressed the cleaning and sanitization provisions in proposed § 3.1(c)(3). Several commenters supported the proposed provisions as written. A small number of commenters stated that we should make the provision more stringent by specifying that hard surfaces that need daily cleaning include wire, and cage and run fronts and sides. The large majority of commenters sought more flexibility regarding cleaning and sanitization. These commenters stated that the timetables proposed for cleaning and sanitization were more stringent than those required by good husbandry practices.

We continue to believe that cleaning and sanitization is necessary for surfaces that become soiled. However, we believe that certain modifications can be made to the proposed provisions without endangering the health and well-being of the dogs and cats. We agree that daily spot-cleaning would be adequate for hard surfaces with which dogs or cats come in contact. We are therefore revising our proposal to require that hard surfaces with which dogs and cats come in contact be spot-cleaned daily. Additionally, we are revising our proposal to require that such hard surfaces be sanitized to prevent any accumulation of excreta or disease hazards, in accordance with the sanitization provisions in proposed § 3.10. Under those provisions, such hard surfaces in primary enclosures would have to be sanitized at least once every two weeks. We are also revising our proposal to provide that floors made of dirt, absorbent bedding, sand, gravel,

grass, or other similar material, be either raked or spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta, rather than requiring that such surfaces be raked and spot-cleaned daily, as originally proposed. Additionally, in this revision we are removing our proposed requirement that all other surfaces of housing facilities be cleaned daily, and are proposing instead that all other surfaces be cleaned when necessary to satisfy generally accepted husbandry practices. We are making this last change in recognition of the fact that some areas in housing facilities, such as upper walls and ceilings, are not in contact with dogs and cats and do not require daily cleaning. We are including "absorbent bedding" as a material similar to dirt, sand, gravel, and grass, because many facilities use such bedding, and consider it preferable to alternative surface materials.

A small number of commenters recommended that we reformat proposed § 3.1(c) to increase its clarity, and that we specify the distinction between the terms "cleaning" and "sanitization," as used in our proposal. We believe the revisions we have made to § 3.1(c) in this revised proposal clarify the intent of that paragraph, and that the revised paragraph is clear as written. Many commenters recommended that we define the word "clean." We believe that the dictionary definition of the word "clean" adequately conveys our intent, and we see no need to define the word "clean" in the regulations.

Housing Facilities: Water and Electric Power—Section 3.1(d)

In the current regulations, § 3.1(b) specifies that reliable and adequate water and electric power must be made available "if required to comply with other provisions of this subpart." In our proposed rule, we set forth provisions concerning water and electric power in § 3.1(d). We proposed there to eliminate the qualifying statement cited above, and to require that all facilities have reliable and adequate electric power and mechanically pressurized potable running water for the dogs' and cats' drinking needs, for cleaning, and for carrying out other husbandry requirements. Based on our inspections of dealer, exhibitor, and research facilities, we believe that dog and cat facilities subject to the regulations cannot be properly cleaned and maintained without electric power and running potable water.

Several commenters specifically supported proposed § 3.1(d) as written.

Many commenters recommended that our reference to "mechanically pressurized potable running water" be changed to "potable running water." We continued to believe that electric power and potable running water are necessary for the cleaning and maintenance of nonhuman primate facilities. However, upon review of the comments, we believe that it is not necessary that the water be "mechanically pressurized." We are therefore revising the proposal to require that potable running water be available.

Several commenters recommended that facilities be required to provide both hot and cold water. Several other commenters stated that the water available should be required to be potable only if used for drinking. We are making no changes to our proposal based on these comments. We disagree that hot water is a necessity for adequate maintenance of a housing facility. We do believe, however, that all water provided must be potable, because it is difficult, if not impossible, to ensure that dogs and cats will not drink from puddles left from cleaning the facility.

Many commenters stated that our proposal erroneously indicated that electric power is necessary for adequate cleaning. We disagree with the commenters' interpretation of our discussion. The only areas specifically cited in our proposal as requiring electric power and heating, cooling, ventilation, and lighting. A small number of commenters asked that we define "reliable electric power." We believe the standard dictionary definitions of these words are adequate, and we see no need to define the term in the regulations.

Housing Facilities: Storage—Section 3.1(e)

We proposed in § 3.1(e) to expand the regulations in current § 3.1(c) concerning proper storage of food and bedding supplies. The proposed provisions retained the requirements that food and bedding be stored so as to protect them from vermin infestation or contamination, and that perishable food be refrigerated. Additionally, we proposed requirements to ensure further the quality of the food and bedding used by animals, and therefore of the area in which the animals are housed. We specified that supplies of food and bedding be stored in leakproof containers to protect the supplies from spoilage as well as from infestation and contamination, and that open supplies of food and bedding be stored in leakproof containers with tightly fitting lids. We

proposed to require that the supplies be stored off the floor and away from the walls, to allow cleaning around and underneath them. We also proposed to require that all food be stored so as to prevent contamination or deterioration of its nutritive value. Under the proposal, substances toxic to dogs and cats would not be allowed to be stored in animal areas or in food storage and preparation areas.

A small number of commenters specifically supported provisions in proposed § 3.1(e) as written. The large majority of commenters responding to these provisions suggested some modifications. Some stated that our proposed requirement that all food and bedding be stored in leakproof containers was unnecessary. Although we continue to believe that the health and well-being of the animals necessitates the storing of open food and bedding supplies in leakproof containers, we agree that until such supplies are open, it is sufficient that they be stored in a manner that protects them from spoilage, contamination, and vermin infestation, and are revising our proposal accordingly.

Some commenters were concerned that our proposed requirement that perishable food be refrigerated would require the refrigeration of milled chows and diets. Others requested clarification of the term "perishable," or recommended that refrigeration of food should be at the attending veterinarian's discretion. Although we believe that standard practice, and not the attending veterinarian, should determine which foods require refrigeration, we are clarifying our intent in this revised proposal by specifying that only food requiring refrigeration must be so stored.

A large number of commenters opposed our proposed requirement that toxic materials not be stored in animal areas, stating that such materials would not jeopardize the health and well-being of the animals if stored in a manner to prevent accidental contamination of food products and contact with dogs and cats; one commenter opposed storage of any chemical substance in animal areas. Although we continue to believe that toxic substances cannot be stored in food storage or preparation areas without endangering the animals, we agree that if such substances are kept in cabinets in other animal areas, there would be little danger to the animals. We are therefore revising our proposal to allow such storage.

A small number of commenters stated that storage of food and bedding near walls should be permissible. We believe that the provision restricting storage

near walls is necessary to allow for cleaning and pest control and are making no changes to the proposal based on these comments.

Housing Facilities: Drainage and Waste Disposal—Section 3.1(f)

In § 3.1(f) as proposed, the requirement was retained that housing facilities provide for removal and disposal of animal and food wastes, bedding, dead animals, and debris, as provided in current § 3.1(d). We proposed to clarify this requirement to include all fluid wastes and to include a provision that arrangements must be made for removal and disposal of wastes at least daily, and more often if necessary. We also proposed to require that trash containers be leakproof and be tightly closed when not in use, and that no forms of animal waste, including dead animals, be kept in food and animal areas.

Requirements for drainage are currently contained in §§ 3.2(e) and 3.3(d), under the sections concerning indoor facilities and outdoor facilities, respectively. Since all types of animal housing facilities, including our proposed categories of sheltered housing facilities and mobile or traveling housing facilities, must have some way of disposing of waste and liquids, we proposed to consolidate all drainage and waste disposal requirements in proposed § 3.1(f).

Both current §§ 3.2(e) and 3.3(d) require that a suitable method of eliminating excess water be provided. We proposed to retain that requirement and expand it to pertain to sheltered and to mobile or traveling housing facilities as well. Current § 3.2(e) requires that any drains used be properly constructed and kept in good repair to guard against foul odors. Additionally, where closed drainage facilities are used, they must be equipped with traps and be installed so that they prevent any back up of sewage onto the floor. We proposed to retain these provisions and expand them for indoor facilities, and proposed that the expanded provisions would also apply to other types of facilities where such drainage is appropriate. We proposed to require that disposal and drainage systems also minimize vermin and pest infestation, and disease hazards. As part of this safeguard, we proposed to require that any sump or settlement pond, or similar system for drainage and animal waste disposal, be located an adequate distance from the animal area of the housing facility. We also proposed to require that puddles of water in animal areas be promptly

mopped up or drained so that the animals stay dry.

A small number of commenters specifically supported the provisions of proposed § 3.1(f) as written. A large number of commenters opposed the proposed requirement that trash containers be leakproof and have lids. Many commenters stated that a lid on a trash can would not necessarily reduce odor or the availability of waste to vermin, as feces and urine are found in cages and are already available to vermin. We are making no changes based on these comments. The intent of the regulations is to minimize disease hazards such as vermin. The cleaning and sanitization requirements of this proposed rule are designed to help ensure that cages are kept adequately clean, and to reduce their attractiveness to pest and vermin. In combination with these requirements, we believe it is necessary to require sanitary practices such as leakproof trash containers with lids.

A large number of commenters stated that in certain facilities daily removal of wastes and dead animals is not necessary, and that the regulations should permit such removal to be conducted as necessary. We agree that such removal, if conducted regularly and frequently, would be adequate to protect the health and well-being of the animals, and are revising our proposal accordingly. We are also adding a provision to our revised proposal to make clear that waste materials must be collected and disposed of in a manner that minimizes contamination and disease risk.

A large number of commenters stated that our proposed requirement for backflow valves in closed drainage systems was unnecessary, and that we should remove the requirement that sewage systems prevent the back-up of sewage onto the floor. A number of other commenters objected in general to our proposed requirement of adequate drainage systems. Many commenters opposed our proposed requirement that drainage systems rapidly eliminate animal waste and water and enable animals to stay dry. Upon review of these comments, we continue to believe that the regulations as proposed are necessary for the health and well-being of the animals housed, and are making no changes to our proposal based on these comments.

A large number of commenters stated that waste and dead animals should be permitted for short periods of time in areas other than animal areas. Such a practice would be permissible under the regulations as proposed, and we are making no changes to our proposal

based on these comments. Several commenters recommended that the regulations permit storage of dead animals in food storage areas, if so directed by the attending veterinarian for the purpose of analysis or autopsy. We believe that the risk of contamination to food items would be too great if such a practice were allowed and are making no changes to our proposal based on these comments.

A number of commenters addressed the issue of sump ponds. Most of the commenters recommended that open sump ponds be prohibited. One commenter recommended that the regulations include a specific minimum distance from research facilities that sump ponds may be located. Based on our experience enforcing the regulations, we believe that sump ponds can be used without health risk if located an adequate distance from a facility. However, what constitutes an appropriate distance will often vary according to the size and configuration of the pond and the topography surrounding the facility. We believe our proposal addresses these variables adequately and are making no changes based on the comments.

A large number of commenters stated that the wording we used to restrict storage of dead animals, animal parts, and animal waste was repetitive. We believe that the wording used for the provision in question is necessary for proper enforcement, and are making no changes based on these comments.

In this revised proposal, we are adding a clarification to § 3.1(f) to specify that only puddles of standing water must be mopped up or drained so that the animals stay dry. This change will clarify that water that evaporates quickly or that is otherwise eliminated quickly does not endanger the health and well-being of the animals, and need not be mopped up.

Housing Facilities: Washrooms and Sinks—Section 3.1(g)

In proposed § 3.1(g), we proposed to retain the requirement in current § 3.1(e) that washing facilities be available to animal caretakers for their own cleanliness, and to include it in proposed § 3.1(g). We received no comments regarding this provision, and are making no changes to the wording included in our proposal.

Temperatures in Housing Facilities

Temperature Requirements in Enclosed Facilities—Sections 3.2(a), 3.3(a), and 3.5(a)

We proposed that enclosed housing facilities—that is, indoor facilities, the

sheltered portion of sheltered housing facilities, and mobile or traveling facilities—be required to provide heating, cooling, and ventilation for the health, comfort, and well-being of dogs and cats housed there. We set forth the heating and cooling requirements for each of the above categories in §§ 3.2(a), 3.3(a), and 3.5(a) respectively. We proposed to set forth ventilation requirements in §§ 3.2(b), 3.3(b), and 3.5(b) respectively.

In establishing minimum temperatures for these facilities, the proposed regulations took into account whether a particular dog or cat housed there is acclimated to relatively low temperatures, and whether for some other reason, either because of breed, age, or condition, a dog or cat should not be subjected to certain low temperatures. In § 3.2(a) of the current regulations for indoor facilities, the minimum temperature allowed is 50° F (10° C) for all dogs and cats in those facilities that are not acclimated to lower temperatures. We proposed that in indoor, sheltered, and mobile or traveling housing facilities, the minimum temperature allowed continue to be 50° F (10° C) for dogs and cats not acclimated to lower temperatures. Because some dogs cannot be acclimated to lower temperatures, we also propose to apply the 50° F (10° C) minimum to breeds of dogs or cats that cannot tolerate lower temperatures without stress and discomfort (e.g., short-haired breeds such as beagles, greyhounds, and Dobermans), and to dogs and cats that are sick, aged, young, or infirm. We proposed that the minimum temperature for all other dogs and cats would be 35° F (1.7° C), except in indoor facilities, where the minimum temperature for all other dogs and cats would be 45° F (7.2° C).

In the current regulations, there is no maximum temperature specified for indoor housing facilities, although auxiliary ventilation is required when the temperature rises to or above 85° F (29.5° C). In the proposed rule, we established a maximum temperature of 95° F (35° C) for indoor facilities, mobile or traveling facilities, and the sheltered part of sheltered housing facilities, when those facilities contain dogs or cats. For each of those categories of shelters, we proposed that auxiliary ventilation, such as fans or air conditioning, would have to be used when the temperature rises to or above 85° F (29.5° C).

We received a large number of comments with regard to the temperature in indoor, sheltered, and mobile and traveling housing facilities. Some commenters opposed temperature

standards of any sort, here and elsewhere in the regulations. A large number of commenters recommended specific temperature ranges that were more stringent than those included in our proposal. A much greater number of commenters stated either that our proposed temperature ranges were too narrow, or that they did not leave enough latitude for professional judgment on the part of the attending veterinarian in the case of individual animals or breeds.

We continue to believe that the well-being of dogs and cats housed in enclosed facilities requires that parameters be established for hot and cold temperatures. Because of the wide range of temperatures that can be tolerated by various species and individual animals, we do not believe it is appropriate to compress the proposed range of allowable temperatures. Doing so would unnecessarily exclude certain temperature levels that are tolerable to many dogs and cats. On the other hand, we do not believe it is appropriate to expand the proposed range of allowable temperatures, except for indoor housing facilities, as explained below. Although certain dogs and cats may be able to tolerate temperatures out of that range, we do not believe such situations occur often enough to warrant making general changes to the proposed standards. However, although we believe it is appropriate to retain specific hot and cold temperature limits for all dogs and cats, upon review and analysis of the comments received, we believe there is some room for professional judgment on the part of the attending veterinarian regarding the proposed 50° C (10° C) lower limit for certain dogs, particularly those that are not acclimated to lower temperatures. For example, in the judgment of the attending veterinarian, a heavy-coated dog might be able to tolerate temperatures lower than 50° F (10° C), even if it is not otherwise acclimated to such lower temperatures. While we are retaining the 50° F (10° C) lower limit for certain dogs in this revised proposal, we are also proposing to provide that whether an individual dog may be exposed to temperatures lower than that limit may be based on the judgment of the attending veterinarian.

In this revised proposal, we are replacing the provision in § 3.2(a) that temperatures in indoor housing facilities drop no lower than 45° F (7.2° C) when dogs or cats are present to provide instead that temperatures must not drop below 35° F (1.7° C) when dogs or cats are present. Based on our review of the comments received, we believe the 45° F

(7.2° C) lower limit originally proposed would unnecessarily exclude temperature levels that are tolerable to many dogs. Establishing a 35° F (7.2° C) lower limit would make the lower limit for indoor facilities consistent with that for sheltered facilities, and for mobile and traveling housing facilities.

In our proposal, we used "short-haired" breeds of dogs and cats as an example of dogs and cats that cannot tolerate temperatures lower than 50° F (10° C) without stress or discomfort. A number of commenters recommended that we delete the specific reference to "short-haired" breeds. We believe that using short-haired breeds as an example is useful to illustrate the intent of the proposed regulations. However, we believe that the revision we are making to our proposal, discussed above, to give the attending veterinarian latitude concerning such animals, should address the commenters' concerns that all short-haired animals would necessarily be subject to the 50° F (10° C) minimum temperature.

A large number of commenters recommended that we reword the temperature requirements in proposed § 3.3(a), regarding sheltered housing facilities, to specify that the sheltered part of such facilities must be heated and cooled "when necessary" to protect the dogs and cats. The same commenters also recommended that we remove the proposed requirement in that same paragraph that specifies that heating and cooling must provide for the animals' "comfort." Such changes would make the provisions for sheltered housing facilities consistent with those proposed for indoor housing facilities. The statement that facilities must be heated and cooled only when necessary is self-evident but, we believe, helpful for emphasis. With regard to the word "comfort," we agree that it is inappropriate for use in the proposed regulations. Although we encourage an environment that will promote the dogs' and cats' comfort, the intent of the regulations is to provide minimum standards for the health and well-being of the animals. For these reasons, we are including both of the changes recommended by the commenters in this revised proposal, and are also removing the word "comfort" in proposed § 3.5, regarding mobile or traveling housing facilities.

A large number of commenters recommended that we replace our proposed requirement that enclosed housing facilities be sufficiently heated and cooled to protect dogs and cats from cold and hot temperatures, to read instead that such animals be protected

from "excessively" cold and hot temperatures. We agree that the wording as proposed would benefit from clarification, and in this revised proposal are specifying that dogs and cats in enclosed housing facilities must be protected from "temperature extremes."

A small number of commenters recommended that the regulations require that alternative surfaces such as concrete or metal be made available to every animal when the temperature falls below 45° F (7.2° C), and to sick, aged, infirm, or very small animals at all times. While we would encourage the use of such alternative surfaces, we do not believe it is practical or necessary to require them in all cases.

A small number of commenters recommended that the regulations require that each animal's condition be reviewed daily, with emphasis on animals with special needs that may be especially affected by extremes of temperature and humidity. While we believe that certain dogs and cats, such as sick, aged, young, or infirm animals, should receive special attention regarding the minimum temperature they are exposed to, and are proposing such provisions, we do not believe that it would be practical or reasonable to require that such animals be monitored each day with regard to temperature and humidity fluctuations. We are therefore making no changes to our proposal based on these comments.

A small number of commenters stated that the regulations regarding minimum temperatures should be phrased as recommendations rather than requirements, to allow for events such as breakdowns or cleaning of equipment. We believe such a change would cause enforcement difficulties and would not be in the best interests of the animals, and we are making no changes to our proposal based on these comments.

Many commenters recommended that we propose provisions to allow dogs and cats that are acclimated to temperatures higher than 95° F and lower than 35° F to be exposed to temperatures outside those limits. We are making no changes based on these comments. Dogs or Cats that are acclimated to temperatures outside the proposed limits under one set of conditions may find the same temperatures intolerable under other conditions. For example, a dog that is acclimated to 100° F temperatures in an outside area may not be able to tolerate the same temperature indoors, because of the enclosed facility's confined nature. Further, the humidity level in a

facility can greatly affect how tolerable a certain temperature level is. Based on our experience enforcing the regulations, we believe that the temperature limits we have proposed are warranted to promote the health and well-being of dogs and cats housed in enclosed facilities.

Several commenters stated that we should require that cooling systems operate automatically. We do not believe how a system works is important, as long as it meets the standards in the regulations, and are making no changes based on these comments. Several commenters requested that we publish our references for the temperature specifications we set. As discussed above, we based the proposed temperature limits on our experience enforcing the regulations.

Ventilation Requirements in Housing Facilities—Sections 3.2(b), 3.3(b), and 3.5(b)

The requirements for ventilation of indoor housing facilities that are set forth in § 3.2(b) of the current regulations were retained in the proposal, and were extended to apply to all sheltered portions of sheltered, and mobile or traveling housing facilities to provide for the health, comfort, and well-being of dogs and cats. Based on our inspections of dealer, exhibitor, and research facilities, we proposed to add (1) that ventilation must also be provided to minimize ammonia levels in these housing facilities; (2) that ventilation in mobile or traveling facilities must minimize exhaust fumes; and (3) that in indoor housing facilities, the relative humidity must be maintained between 30 and 70 percent. Although, as proposed, the 30-70 percent range would apply to all dogs and cats, we indicated in the supplementary information included in the proposed rule that we expected generally accepted professional and husbandry practices to be followed in providing humidity levels appropriate to particular breeds of dogs and cats. The 30-70 percent range corresponds to the recommendations contained in the NIH Guide. We did not propose to require that precise humidity levels be maintained in sheltered housing facilities or mobile or traveling facilities. The configuration of many sheltered facilities makes humidity control impracticable, and mobile or traveling housing facilities may travel into many different parts of the United States, with varying levels of humidity.

A number of commenters supported our proposed provisions as written. Several commenters recommended that allowable humidity limits be specified

for mobile and traveling housing facilities. A large number of commenters stated that not all dogs and cats require humidity levels in the 30-70 percent range, and that it would therefore be inappropriate to establish specific humidity limits. Many commenters recommended that we require only that the appropriate relative humidity be left to the judgment of the attending veterinarian, and be maintained at a level that ensures the health and well-being of the animals housed in the facility. Upon review of the evidence presented in the comments, we agree that it is not appropriate or necessary to set specific upper and lower limits on relative humidity. We agree that the effect on animals of a particular level of humidity depends to a great degree on other factors, such as temperature and ventilation. We are therefore not including such specific limits in this revised proposal. However, we are providing in this revised proposal that, in those housing facilities where humidity can be controlled (indoor housing facilities and the sheltered part of sheltered housing facilities) the relative humidity must be at a level that ensures the health and well-being of the animals housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

A number of comments took issue with our proposed requirement that enclosed housing facilities be sufficiently ventilated to minimize odors, drafts, ammonia levels, and moisture condensation. (In mobile or traveling housing facilities the minimizing of exhaust fumes would also be required). The commenters expressed concern that the requirements would lead to significant disagreement as to the meaning of "minimize." Some commenters expressed doubt that odors could always be minimized. We are making no changes to our proposal based on these comments. The provisions as proposed do not require the elimination of objectionable odors, fumes, etc., only that they be held to minimal levels. We believe that such a performance standard can be met and enforced.

A number of commenters addressed our proposed requirement that air, preferably fresh air, be provided by means of windows, vents, fans, or air conditioning. One commenter recommended that fresh air be mandatory. We do not believe that it would be practical or necessary to require that fresh air always be provided and are making no changes to our proposal based on this comment. A

much greater number of commenters stated that in many cases recycled air is preferable to fresh air, and recommended that we change our reference to "air" to read instead "ventilation." We agree that the word "ventilation" better encompasses the intent of our proposed provision, and are therefore revising our proposal to provide that ventilation must be provided by windows, doors, vents, fans, or air conditioning.

Several commenters recommended that auxiliary ventilation be required when the ambient temperature exceeds 80° F, rather than 85° F as proposed. The requirement for auxiliary ventilation at temperatures exceeding 85° F is part of the current regulations. Based on our experience enforcing the regulations, we believe that it is adequate to ensure the health and well-being of animals housed in enclosed facilities. We are therefore making no changes to the proposal based on these comments. A number of commenters opposed the requirement for auxiliary ventilation in cases where the animals are acclimated to high temperatures. We are making no changes to our proposed based on these comments. As discussed above, an animal acclimated to high temperatures in an outside area may find the same temperatures intolerable in an enclosed area without sufficient ventilation.

Many commenters stated that it would be impossible to stay within the relative humidity limits we proposed after steam cleaning, unless the air conditioning systems were set at 65° F or below. As discussed above, we are revising our proposal to remove upper and lower relative humidity limits.

Several commenters recommended that we reformat our proposed provision on relative humidity for readability. We believe that the proposed provisions are understandable as written and are making no changes to our proposal based on these comments.

For the same reasons discussed above regarding temperature requirements, we are removing the requirement in our proposal that ventilation in the enclosed parts of housing facilities provide for the "comfort" of the dogs and cats housed in the facility.

Lighting Requirements in Housing Facilities—Sections 3.2(c), 3.3(c), and 3.5(c)

In the proposed regulations, we retained the requirement in § 3.2(c) of the current regulations that indoor housing facilities have ample light to permit routine cleaning and inspection. We proposed to extend this requirement to all of the enclosed housing facilities

included in the proposed regulations. We also proposed to require in each case that either natural or artificial light be provided for at least 8 hours each day, corresponding to the natural period of daylight. Our experience inspecting licensees' and registrants' facilities has shown us that in the past some licensees and registrants have kept dogs and cats in darkened rooms throughout most of the day. In the case of indoor housing facilities and mobile or traveling housing facilities, we proposed to require that if only artificial light, such as fluorescent light, is used, it provide full-spectrum illumination. Also, in our proposal, we retained the requirement in the current regulations for indoor facilities that primary enclosures be placed so as not to expose the animals in them to excessive light, and we proposed to extend that requirement to sheltered enclosures. We provided as an example of excessive light the situation where an animal is housed in the top cage of a stack of cages, near a lighting fixture.

A large number of commenters addressed our proposed provision that would require full-spectrum lighting. While a small number of commenters supported such a comment, a much larger number of commenters stated that full-spectrum lighting was unnecessary for the health and well-being of dogs and cats. Others stated that it was impractical because such lighting fixtures, when shielded for sanitation purposes, will filter out certain wavelengths of light. Some commenters presented evidence that continued exposure to full-spectrum illumination, strictly defined, could actually harm the vision of animals. Upon review of the comments, we believe that the practical problems associated with full spectrum lighting warrant our removing its requirement in the proposal, and we are doing so in this revised proposal.

Many commenters questioned the need for at least 8 consecutive hours of light each day, stating that such a specific timetable does not allow for professional judgment regarding the needs of individual breeds and animals. We agree that 8 hours of light may not be necessary or warranted in all cases, that it may not coincide with normal outdoor lighting cycles at particular times of the year, and that a provision for a "normal diurnal lighting cycle" would better meet the intent of the proposed regulation. We are therefore revising our proposal to provide that animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. In order to allow for professional judgment regarding the

lighting needs of individual animals or species, we are proposing in this revised proposal that lighting in animal facilities must provide sufficient illumination to provide for the well-being of the animals, as well as to allow for good housekeeping practices, adequate inspection of animals, and adequate cleaning.

A number of commenters recommended that we provide a definition of "excessive light." We believe that the term is self-explanatory; that it means a degree of light available is detrimental to the well-being of the animals. Whether the light that is harmful to the animals would be determined on a case-by-case basis. Some commenters took issue with the statement in the supplementary information of our proposal that an animal housed in the top cage of a stack of cages near a light fixture would be exposed to excessive light. We are making no changes based on these comments. The provisions we proposed would prohibit exposing the animals to excessive light. In our supplementary information we provided just one example of a variety of situations we believe could constitute excessive light. We continue to believe that it is necessary for the health and well-being of dogs and cats that they not be exposed to excessive light.

Several commenters stated that our proposed lighting standards were minimal. It is our purpose throughout the regulations to establish minimum standards for the health and well-being of regulated animals. Although we encourage practices that exceed the minimum, we believe that the standards we are proposing would be adequate to meet their purpose.

A number of commenters recommended that we provide the authority to make exceptions to lighting standards to the Committee at research facilities. The regulations in § 2.38(k)(1) of part 2 already provide that exceptions to the standards in part 3 may be made when such exceptions are specified and justified in the proposal to conduct an activity and are approved by the Committee.

Specific Provisions for Indoor Housing Facilities—Section 3.2(d)

Section § 3.2(d) of the current regulations, regarding the interior surfaces of indoor housing facilities, requires that those surfaces be substantially impervious to moisture and readily sanitized. In § 3.2(d) of the proposed regulations, we retained the requirement that all surfaces be impervious to moisture, but made an exception in the case of ceilings that are

replaceable. An example of this would be a suspended ceiling with replaceable panels. The requirements we proposed concerning interior surfaces are more stringent for indoor housing facilities than for any other type of facility. Only for indoor facilities, for example, did we propose that ceilings have to be either impervious to moisture or replaceable. This is because indoor facilities generally operate on one ventilation system, and any disease organisms or excessive odors that occur in the facility might spread throughout the facility, requiring a thorough cleaning or replacement of all interior surfaces.

A number of commenters specifically supported the proposed provisions as written. A number of other commenters stated that it is inconsistent to consider a pervious floor a threat to an animal's welfare in indoor facilities, but not in outdoor facilities. Based on our experience enforcing the regulations, we do not believe that indoor floors in facilities used to house dogs and cats can be kept sufficiently clean and sanitary unless they are impervious. The nature of the facilities and the animals housed has indicated to us that indoor floors that are not impervious tend to stay damp and warm, which encourages bacterial growth and other health risks. We are therefore making no changes to the proposal based on these comments. One commenter stated that ceilings should always be impervious to moisture, whether or not they are replaceable. We are making no changes based on this comment. In many cases, replacing a ceiling would be more effective in minimizing disease risk than cleaning it.

Specific Provisions for Sheltered Housing Facilities—Section 3.3(d) and (e)

In proposed § 3.3(d) regarding sheltered housing facilities, we set forth the requirement that dogs and cats be provided with adequate shelter and protection from the elements.

In order to maintain sanitary conditions in sheltered housing facilities, we proposed to establish the following requirements in § 3.3(e). Under our proposal, the following areas would have to be impervious to moisture: (1) Indoor floor areas in contact with the animals; (2) outdoor floor areas not exposed to the direct sun or made of a hard material such as wire, wood, metal, or concrete, in contact with the animals; and (3) all walls, boxes, houses, dens, and other surfaces in contact with the animals. We proposed that outside floor areas in contact with the animals and exposed to the direct sun could consist

of compacted earth, sand, gravel, or grass.

A small number of commenters specifically supported the provisions pertaining to sheltered housing facilities as written. A number of commenters asked that we define "adequate shelter." To clarify the intent of this term, we are specifying in this proposal that the shelter must be adequate to protect the health and well-being of the animals housed. Several commenters recommended that the regulations set forth certain specific construction standards for shelters with regard to protection from the elements. We are making no changes to our proposal based on these comments. We believe that the provisions in this revised proposal that dogs and cats be provided with adequate shelter from the elements to protect their health and well-being will enable us to ensure that whatever shelter configuration is used meets the regulatory standards.

Several commenters recommended that the regulations require that clean, dry bedding be provided in sheltered housing facilities. We are making no changes based on these comments. Although we proposed such a requirement for shelters in outdoor housing facilities, we believe that the fact that dogs and cats in sheltered housing facilities have access to temperature-controlled enclosed housing makes the requirement unnecessary for such facilities.

Specific Provisions for Outdoor Housing Facilities—Section 3.4

The intent of § 3.3 of the current regulations is to provide adequate standards for the care of animals housed outdoors. However, our inspections of dealers' and exhibitors' facilities in climates with the temperature extremes have indicated that some licensees are not meeting what we believe should be minimum standards for the treatment of dogs and cats. Specifically, we believe that the regulations need to be made more stringent regarding the types of dogs and cats that can be kept outdoors, and regarding what shelter is necessary for dogs and cats kept outdoors. Therefore we proposed to revise the current requirements for outdoor facilities, to make them more clearly defined and more stringent.

Because outdoor facilities cannot be temperature-controlled, we believe it is necessary to judge a dog's or cat's suitability for outdoor housing on an individual basis. We set forth provisions in proposed § 3.4(a)(1) that a dog or cat could not be kept in an outdoor facility if (1) it is not acclimated to the temperatures prevalent in the area or

region where the facility is located; (2) it is of a breed that cannot tolerate the prevalent temperatures of the area without stress or discomfort (such as short-haired breeds in cold climates); or (3) it is aged, young, sick or infirm. We recognize that in some situations, particularly in the case of dogs or cats obtained from pounds, it will not be known whether an animal has been acclimated to prevailing temperatures. Therefore, in proposed § 3.4(a)(2), we provided that if a dog's or cat's acclimation status is unknown, it must not be kept in an outdoor facility in any month in which, during the preceding 5 years, the temperature at the facility has been less than 35 °F (1.7 °C).

With regard to the type of shelter required for dogs and cats housed outdoors, we believe that the current regulations should be expanded to specify what is necessary for better and more humane treatment of the dogs and cats. In essence, the current regulations require that dogs and cats be provided with sufficient shade to protect them from the direct rays of the sun, shelter to keep them dry during rain or snow, and shelter when the atmospheric temperature falls below 50 °F (10 °C). Additionally, bedding or some other protection is required when the ambient temperature falls below that to which the dog or cat is acclimated.

In § 3.4(b) of the proposed rule, we set forth the requirement that all outdoor facilities housing dogs or cats include a shelter structure that is accessible to all animals in the facility, and that is large enough to allow all animals in the structure to sit, stand, and lie in a normal manner, and to turn about freely. We proposed in § 3.4(d) that the shelter structure would have to: (1) Provide adequate shelter and protection from the cold and heat; (2) be protected from the direct rays of the sun and the direct effect of wind, rain, or snow; (3) have a wind break and a rain break at its entrance; and (4) contain clean, dry, bedding material. We also proposed in § 3.4(b) that in addition to the shelter structure, there would have to be a separate outside area of shade provided, large enough to contain all the animals at one time and to protect them from the direct rays of the sun. This shaded area would give the animals relief on hot days, when they should be unlikely to seek shelter in an unventilated structure. In this revised proposal, we are including clarifying language that multiple shelters and multiple outside areas of shade would be acceptable.

In proposed § 3.4(c), we set forth the requirement that all building surfaces that are in contact with dogs or cats in outdoor housing facilities be impervious

to moisture. We specified that metal barrels, old refrigerators or freezers, and the like would not be permitted as shelter structures, and that the floors of outdoor housing facilities could be of compacted earth, sand, gravel, or grass, but would have to be kept clean.

Several commenters specifically supported our proposed provisions regarding outdoor housing facilities as written. A large number of commenters objected to our specifying in § 3.4(a)(1) which categories of dogs and cats would not be permitted to be housed in outdoor housing facilities. The commenters stated that such specificity precludes professional judgment on the part of the attending veterinarian as to whether being housed outdoors would be harmful to certain animals. Some commenters stated that being housed outdoors might even be beneficial to some of the dogs that would be excluded from outdoor housing under our proposed regulations. Based on our experience enforcing the regulations, we continue to believe that, in general, the categories of dogs and cats specified in proposed § 3.4(a)(1) are unable to tolerate temperature conditions in outdoor facilities. However, we recognize that, in certain cases, individual dogs or cats may not be harmed by, or may benefit from, conditions in outdoor facilities. We are therefore revising proposed § 3.4(a)(1) to provide that the categories of dogs and cats listed there may not be housed in outdoor housing facilities, unless such housing of the dogs or cats is specifically approved by the attending veterinarian.

A large number of commenters addressed our proposed provision that, when their acclimation status is unknown, dogs and cats must not be kept in outdoor facilities during any month in which, during the preceding 5 years, the temperature at the facility has been less than 35 °F (1.7 °C). A number of commenters opposed the proposed provision without explanation. A number of commenters stated that the 35 °F (1.7 °C) standard was too low. Several commenters suggested that we replace the word "temperature" in the provision with the term "average daily temperature." Many commenters recommended that we substitute more general wording, to provide that dogs and cats acclimated to and tolerant of conditions at the facility would be permitted to be housed in the facility. Others suggested that the decision whether to house such dogs and cats in outdoor facilities be left to the attending veterinarian.

Upon review of the comments, we believe that some modification of the proposed provision is warranted. While we continue to believe, based on our experience enforcing the regulations, that 35 °F (1.7 °C) is a reasonable lower limit for dogs and cats whose acclimation status is unknown, we believe that the regulation we proposed is unnecessarily complex. Our intent in wording our proposal as we did was to ensure that animals whose acclimation status is unknown not be exposed to temperatures lower than 35 °F (1.7 °C). We are therefore revising our proposal to clarify that point, by specifying that when their acclimation status is unknown, dogs and cats must not be kept in outdoor facilities when the ambient temperature is less than 35 °F (1.7 °C).

Many commenters stated that the 35 °F minimum temperature need not apply to short-haired dogs if adequate insulated housing is provided. We are making no changes to the proposed provisions based on these comments. Even if a shelter structure were adequately temperature controlled, it would be necessary for the dog to leave the shelter periodically to take care of elimination and for feeding.

One commenter recommended that specific standards for acclimation should be set forth in the regulations. In enforcing the regulations, we would evaluate acclimation according to its standard dictionary definition, and do not believe it is necessary to include such a definition in the regulations.

A large number of commenters addressed the requirements in proposed § 3.4(b) that outdoor housing facilities have a shelter structure in which all animals in the facility can sit, stand, and lie in a normal manner, and a separate shade area large enough to contain all the animals. A number of commenters specifically supported the proposed provisions as written. A much greater number of commenters stated that the proposed standards were unnecessary, unjustified, and redundant with the requirements in proposed § 3.4(d) that dogs and cats in outdoor housing facilities be provided shelter from the elements. These commenters recommended that proposed § 3.4(b) be changed to read that the shelter must be sufficiently large to comfortably provide protection for all dogs and cats housed in the facility at the same time. We do not believe that proposed §§ 3.4 (b) and (d) are redundant. Section § 3.4(b) sets forth size standards for the required shelter; § 3.4(d) sets forth performance standards for the shelter. We do agree that, for purposes of clarity, the

provisions in proposed §§ 3.4 (b) and (d) should be combined in one paragraph, and we are revising our proposal to include them in proposed § 3.4(b).

A large number of commenters addressed the provisions in proposed § 3.4(c), regarding the construction of outdoor housing facilities. Many commenters took issue with our proposed requirement that floor surfaces in outdoor housing facilities—if made of earth, sand, gravel, or grass—be replaced if there are any prevalent odors, diseases, insects, pests, or vermin. The commenters expressed the opinion that such materials cannot be replaced. We disagree, and believe that it is both practical and feasible to replace any of the materials listed. For the reasons discussed above under "Housing Facilities: Surfaces; Cleaning," we are including "absorbent bedding" in this revised proposal as one of the materials that may be used for floor surfaces in outdoor housing facilities.

Several commenters recommended that we specify the structural requirements of a shelter structure—i.e., how it should be built; what materials may be used. While we believe it is neither appropriate nor necessary to establish specific design standards for shelters, as long as they perform according to the proposed standards, we do believe that it is necessary that each such shelter contain at least a roof, four sides, and a floor. We are therefore revising our proposal to add such wording.

A number of commenters stated that the regulations should prohibit housing dogs and cats on surfaces of dirt, gravel, or sand. Based on our experience enforcing the regulations, we do not believe that such surfaces are harmful to the health and well-being of dogs or cats, and are therefore making no changes to our proposal based on these comments.

A small number of commenters recommended that § 3.4(c) include the requirement that floors and any other surfaces in outdoor housing facility shelters that come in contact with animals be impervious to moisture and be maintained in accordance with the sanitization procedures set forth elsewhere in the proposed regulations. Such surfaces are included among those addressed in proposed § 3.1, regarding general requirements for housing facilities, and we believe the construction, cleaning, and sanitization requirements set forth in that section are adequate to provide for the health and well-being of the animals housed. However, for clarity and emphasis, we are adding wording to our proposal to

provide that all such surfaces must be maintained on a regular basis, and that surfaces of outdoor housing facilities that cannot be readily cleaned and sanitized must be replaced when worn or soiled.

Several commenters recommended that we include "cars" among the items that may not be used as shelters in outdoor housing facilities. A small number of commenters also recommended that we exclude all refrigerators and freezers from use as shelters, not just "old" refrigerators and freezers as proposed. We believe both the recommended changes are warranted and we are revising our proposal accordingly.

A large number of commenters addressed the provisions in proposed § 3.4(d) regarding specifications for shelters in outdoor housing facilities. Several commenters specifically supported the proposed provisions as written. Many commenters opposed our proposed requirement that the shelter be provided with a rain and wind break. While we do not believe it is appropriate to provide specific standards for the design of such breaks, we continue to believe that they are necessary to provide adequate shelter from the elements and are making no changes to our proposal based on these comments.

A number of commenters addressed the proposed provision requiring clean, dry bedding in shelters in outdoor facilities. One commenter stated that bedding should not be required when the shelter provided is adequate and the temperature exceeds 35 °F (1.7 °C). While we disagree that bedding is not necessary until the temperature drops to 35 °F (1.7 °C), we do agree that the proposed regulations should be clarified to indicate that bedding is required only in the case of cold temperatures. We are therefore revising our proposal to provide that shelters in outdoor facilities must contain clean, dry, bedding material when the temperature is below 50 °F (10 °C), and additional clean, dry bedding when the temperature is 35 °F (1.7 °C) or lower.

Many of the commenters addressing the issue of bedding saw practical problems with its implementation. A number of commenters opposed using bedding in outdoor housing facilities where a washdown procedure is carried out twice a day; others stated that it would not be possible to have clean dry bedding at all times, and that the regulations should allow for a grace period before introduction of new bedding. We are making no changes based on these comments. As discussed

above, bedding would be required only in cold temperatures, and it is not usual procedure to carry out washing of shelters in such temperatures. As far as how often bedding needs to be replaced, we anticipate that the regulations would be enforced on the basis of accepted husbandry practices.

A small number of commenters stated that the regulations should require enough bedding to make a soft, protective bed. While we would encourage that the comfort of the animals be considered in supplying bedding, we do not believe that it would be appropriate or practical to include such standards in the regulations, which are intended to set forth minimum standards to ensure the health and well-being of the regulated animals.

Primary Enclosures—Section 3.6

In proposed § 3.6, we proposed to amend current § 3.4, "Primary enclosures." The current section provides general requirements for construction and maintenance of primary enclosures, uniform space requirements for each dog or cat housed in a primary enclosure, and provisions regarding litter and resting surfaces for cats and the tethering of dogs on chains. We proposed to expand the current general requirements, to add some new requirements, and to clarify the existing requirements in accordance with the intent of the amendments to the Act.

Primary Enclosures: General Requirements—Section 3.6(a)

The provisions we set forth in proposed § 3.6 regarding primary enclosures contained requirements that all primary enclosures meet certain minimum standards to help ensure the safety and well-being of dogs and cats. A primary enclosure is defined in part 1 as "any structure or device used to restrict an animal or animals to a limited amount of space, such as a room, pen, run, cage, compartment, pool, hutch, or tether." Included among the primary enclosures subject to the proposed regulations would be those used by circuses, carnivals, traveling zoos, educational exhibits, and other traveling animal acts and shows. In § 3.6(a) we proposed to continue to require that primary enclosures be structurally sound and maintained in good repair to protect the animals from injury, to contain them, and to keep predators out. We also proposed to require that the primary enclosures keep unauthorized humans out. We proposed to continue to require that the primary enclosures enable the animals to remain dry and clean; that they provide the animals with convenient access to food and

water; that they provide sufficient space for the dogs and cats to have normal freedom of movement; and that their floors be constructed in a manner that protects the animals from injury. With regard to this last requirement, we proposed to specify that if the floors of primary enclosures are of mesh or slatted construction, they must not allow the animals' appendages to pass through any openings in the floor.

We proposed to add requirements that the primary enclosures be constructed without sharp points or edges, and that they provide sufficient shade to the animals in the enclosures and protect them from temperature extremes and other weather conditions that might be uncomfortable or hazardous to the animals. We also proposed to require that the primary enclosures be easily cleaned and sanitized, or be replaceable when worn or soiled.

A number of commenters specifically supported the provisions of § 3.6(a) as written. A small number of commenters stated that the regulations in proposed § 3.6(a)(2), regarding the construction of primary enclosures, were redundant and unclear. We believe that the proposed provisions are clear as written. Further, we believe each of the provisions set forth addresses a distinct need, and is not redundant with other provisions. We are therefore making no changes based on these comments.

A large number of commenters addressed the provisions in proposed § 3.6(a)(2)(x), which state that floors of primary enclosures that are of mesh or slatted construction must be constructed so as to prevent the animals' appendages from passing through any openings in the floor. A small number of those commenters recommended that we replace the word "appendage" with the word "limb," so that "appendage" would not be construed to include a tail or toenail. We agree that such a change in wording would clarify the intent of the proposed rule and are revising our proposal to read that the floors of primary enclosures must be constructed so as to protect the animals' feet and legs from injury, and to prevent the animals' feet from passing through any openings in the floor. Many commenters recommended that we delete entirely the proposed requirement regarding mesh or slatted floors. We continue to believe that it is necessary for the safety of the animals that their limbs do not pass through openings in the floor and are making no change based on these comments.

Paragraph (iv) of § 3.6(a) of our proposal states that primary enclosures must be constructed so as to keep

predators and unauthorized humans from entering the enclosures. Many commenters objected to this provision, stating that such security is unnecessary for the primary enclosure because elsewhere in the regulations the housing facility itself is required to have safeguards in place preventing the entry of unwanted animals and unauthorized humans. We disagree with the assertion of the commenters. Even assuming that no unwanted animals would ever enter the facility from the outside, there is still the risk that animals within the facility might escape from their enclosures and pose a risk to confined animals, unless the primary enclosures guard against such risk. We are therefore making no changes to the proposal based on these comments. However, after review of the proposal, we are revising proposed § 3.6(a)(iv) to provide that the primary enclosures must keep out "other animals," rather than "predators" as proposed. There may be animals that are not predators of dogs or cats in the strict sense, but that could nonetheless harm the dogs or cats. We believe such animals must be kept out of the primary enclosures.

Paragraph (xi) of § 3.6(a) of our proposal states that primary enclosures must be constructed so as to provide sufficient space to allow each animal to turn about freely, to stand, sit, and lie in a comfortable, normal position, and to walk in a normal manner. A small number of commenters recommended that the wording be changed to read "provide space that is adequate and permits freedom of movement and normal postural adjustments." We believe that the wording in the proposal conveys the intent of the provision adequately and are making no changes based on these comments. Several commenters requested that we define and justify the phrase "to walk in a normal manner." We believe that the meaning of the phrase and its justification are self-evident and we are making no changes based on these comments.

Additional Primary Enclosure Requirements for Cats—Section 3.6(b)

We proposed to change the space requirements for cats. In general, the proposed regulations based how much space a cat should have on the animal's weight, and whether it is a nursing mother. The space requirements in §§ 3.4(b) (1) and (3) of the current regulations are uniform for all cats, regardless of size, and require that each cat be given a minimum of 2.5 ft², with room to turn about freely, and to easily stand, sit, and lie in a comfortable

normal position. We believe, based on our inspections of research facilities, that the current minimum space requirements should be increased for all cats. Additionally, because the weight of a cat is a good indicator of its overall size, we believe that floor space requirements should distinguish between cats of different weights. Our proposed standards would provide cats with the space we believe is necessary, and at the same time make our regulations correspond more closely to the NIH Guide. We proposed in § 3.6(b)(1) to require that weaned cats weighing 8.8 lbs (4 kg) or less be provided with at least 3.0 ft² (0.28 m²) of floor space, and that cats weighing over 8.8 lbs (4 kg) be provided with a minimum of 4.0 ft² (0.37 m²) of floor space. Additionally, we proposed to require that each queen with nursing kittens be provided with an additional amount of floor space, equivalent to at least 5 percent of her minimum required floor for each nursing kitten in the litter. For example, under our proposal, five nursing kittens would require a 25-percent increase and 10 nursing kittens would require a 50-percent increase. We proposed to provide that the minimum floor space required would be exclusive of any food, water, or litter pans, and the height of the primary enclosure for cats would have to be at least 24 inches (60.96 cm).

A large number of commenters addressed the provisions in proposed § 3.6(b)(1) regarding minimum space requirements for cats. A number of commenters specifically supported the proposed provisions as written. A small number of commenters recommended that the general space requirements for cats provide for more minimum space. A very large number of commenters stated that cat cages need to be large enough to allow normal postural adjustments, including full extension of front and back legs. We agree that "stretching" is part of a cat's normal behavior, and that space requirements need to allow for such activity. We believe that the space requirements we proposed would provide adequate room for such postural adjustments in a horizontal direction.

Many commenters opposed the proposed general increase for cats. Of those opposing the increase, most recommended retaining the current space requirements for cats, including height requirements, subject to the judgment of the attending veterinarian. We are making no changes based on these comments. We continue to believe, based on our experience enforcing the regulations, that the current space standards are inadequate

for the well-being of cats. In developing new proposed space standards, we have consulted extensively with HHS, as statutorily mandated. The general standards we proposed correspond to Guidelines published by NIH. By coordinating our standards with the NIH Guidelines, we are furthering harmonious regulations throughout the Federal government, while ensuring the well-being of cats at regulated facilities.

A large number of commenters addressed the provisions in proposed § 3.6(b)(1)(iv) regarding increased space for queens with nursing kittens. Many commenters specifically supported the proposed provision as written. A very large number of commenters recommended that we require more space for nursing kittens than that provided for in the proposal. Many commenters stated that we should delete all reference to percentage increases for kittens. Of the commenters recommending deletion of the provision, most recommended that each queen with nursing kittens be provided with an additional amount of floor space to be determined by the attending veterinarian, based on the breed and behavioral nature of the queen, in keeping with generally accepted husbandry practices. A small number of commenters stated that requiring a specified amount of additional space for nursing kittens would sometimes require that the queen and her kittens be moved to a new cage right after birth, and that such a relocation would unnecessarily disturb the queen and could result in kitten mortality.

While we continue to believe that a 5 percent increase per nursing kitten is in most cases reasonable and necessary for the well-being of both the dam and kittens, upon review of the comments we agree that situations may arise where it is unnecessary or even harmful to require a specific increase in size, without allowing for professional discretion. Therefore, we are revising § 3.6(b)(1)(iv) to provide that each queen with nursing kittens must be provided with an additional amount of floor space, based on her breed and behavioral characteristics, in accordance with generally accepted husbandry practices as determined by the attending veterinarian. The revised proposal would require that if the additional amount of floor space for each nursing kitten is less than 5 percent of the minimum requirement for the queen, such housing must be approved by the Committee in the case of research facility, and by the Administrator in the case of dealers and exhibitors.

A large number of commenters requested that justification be provided for the provision in proposed § 3.6(b)(1)(v) that food and water pans would not be counted as required floor space. We believe it is obvious that requiring animals to walk or rest in their food and water receptacles in order to achieve adequate space would encourage sanitation and health problems. We believe the proposed provision is warranted as written.

A large number of commenters requested that we clarify whether litter pans would be counted as part of the minimum floor space under the proposed regulations. A small number of commenters recommended that they be so counted. While we continue to believe that food and water containers are not usable as floor space for animals contained, we believe it would be reasonable to consider litter pans as part of the floor space, as long as they are properly cleaned and sanitized. We are therefore revising our proposal accordingly.

A number of commenters stated that the proposed increases in space requirements for cats would make cleaning and sanitization more difficult when the large cages are stacked on each other. We believe that this concern is a logistical difficulty that can be overcome and that does not justify abandoning the proposed increases in space requirements.

In our proposal, we provided that all cats housed in the same primary enclosure would have to be compatible. We proposed to retain the requirement in current § 3.4(b)(3) that no more than 12 adult nonconditioned cats be housed in the same primary enclosure and to set forth that requirement in proposed § 3.6(b)(2). In addition, we proposed that the following restrictions would apply: queens in heat could not be housed in the same primary enclosure with sexually mature males, except for breeding; queens with litters and kittens under 4 months of age could not be housed in the same primary enclosure with any other adult cats, except when maintained in a breeding colony; and cats with a vicious or aggressive disposition would have to be housed separately.

Most of the commenters responding to the proposed provisions on compatibility supported them as written. Several commenters recommended that we clarify that kittens under 4 months of age may be housed with their dam. We believe that such a clarification is warranted and we are changing our proposal accordingly.

In § 3.6(b)(3), we proposed to retain the current requirement that in all primary enclosures having a solid floor, a receptacle with litter be provided to contain excreta. A small number of commenters stated that litter in a receptacle should be required, whether or not the floor is solid. We are making no changes to our proposal based on these comments. Floors with openings provide an adequate means of eliminating excreta and we see no need to require litter receptacles in such cases.

The current standards for cats in § 3.4(a)(2)(ii) state that there must be a solid resting surface in each primary enclosure that will comfortably hold all occupants at the same time, and that the resting surface must be elevated if the enclosure holds two or more cats. We proposed to require in § 3.6(b)(4) that all such resting surfaces be elevated, even if only one cat is in the enclosure, and to clarify that the resting surfaces not be counted as part of the minimum floor space. As proposed, the resting surfaces would have to be impervious to moisture, and would have to be either easily cleaned and sanitized, or easily replaceable when soiled or worn.

A number of commenters stated that resting surfaces need not be solid to meet the needs of the cats. We agree, and are removing the requirement from our proposal that resting surfaces be solid. We are also adding a clarification to our proposal to indicate that low resting surfaces will be considered part of the minimum floor space.

We proposed to provide, in § 3.6(b)(5), that cats in mobile or traveling shows or acts may be kept, while the show or act is traveling from one temporary location to another, in transport containers that comply with all requirements of proposed § 3.14 of subpart A, other than the marking requirements in proposed § 3.14(a)(6). Under the proposal, when the show or act is not traveling, the cats would have to be placed in primary enclosures that meet the minimum requirements of proposed § 3.6. Mobile or traveling shows and acts normally remain in one location for several days and then move to another location, with the movement taking a day or less. Because the animals are less subject to injury in smaller enclosures while traveling, we proposed to allow the use of transport cages during this time. However, under the proposed regulations, when not traveling, the cats would have to be placed in primary enclosures that comply with the minimum space requirements and other requirements of § 3.6. The only commenters who responded to these

provisions supported them. We are therefore making no changes to § 3.6(b)(5) of our proposal.

Additional Primary Enclosure Requirements for Dogs—Section 3.6(c)

In proposed § 3.6(c), we retained the formulas in § 3.4(b)(2) of the current regulations for calculating the floor space for dogs [(length of dog in inches + 6) × (length of dog in inches + 6) = required square inches of floor space; required square inches / 144 = required square feet]. Because of the great variation in size and body conformation among the various species of dogs, we believe the present formula for calculating space based on body length is more appropriate than a formula based on the weight of the dog. Space requirements based on weight do not allow for the differences in body conformation among different breeds of dogs, such as bulldogs and whippets or greyhounds. Space requirements based on body length do allow for differences in body conformation. We therefore proposed to retain such provisions as a more appropriate method for determining minimum space requirements. We also proposed to require that the minimum height of a primary enclosure be at least 6 inches above the highest point of the body (normally the ears) of the tallest dog in the enclosure when standing in a normal position.

We proposed that, as with cats, nursing mothers would have to be provided with additional space. In proposed § 3.6(c)(1)(ii), we set forth the requirement that each bitch with nursing puppies be provided with an additional amount of floor space, equal to 5 percent of her minimum floor space, for each nursing puppy in the litter.

A number of commenters specifically supported our retention of the current general space requirements for dogs. A large number of comments addressed the provisions in proposed § 3.6(c)(1)(ii) regarding how much additional space should be provided bitches with nursing puppies. A small number of these commenters opposed without explanation the provisions regarding increased space. Several commenters stated that each nursing puppy should be provided more space than proposed. Most of the commenters addressing the issue of space for puppies recommended that we delete all reference to percentage increases of floor space. These commenters recommended that the regulations provide that each bitch with nursing puppies must be provided with an additional amount of floor space, to be determined by the attending veterinarian, based on the breed and

behavioral nature of the bitch and in keeping with generally accepted husbandry practices.

For the reasons we discussed above with regard to minimum space requirements for cats, we believe it is appropriate to modify our proposed requirements regarding additional space for bitches with nursing puppies. Therefore, we are revising § 3.6(c)(1)(ii) of our proposal to provide that each bitch with nursing puppies must be provided with an additional amount of floor space, based on her breed and behavioral characteristics, in accordance with generally accepted husbandry practices as determined by the attending veterinarian. We are proposing that if the additional amount of floor space for each nursing puppy is less than 5 percent of the minimum requirement for the bitch, such housing must be approved by the Committee in the case of a research facility, and by the Administrator in the case of dealers and exhibitors.

Many commenters addressed the proposed provisions regarding enclosure height for dogs. A small number of commenters opposed any requirements regarding cage height. A large number of commenters recommended that the provisions for enclosure height provide that the top of the enclosure be at least 6 inches above the head of the tallest dog in the enclosure, rather than 6 inches above its ears. A small number of commenters stated that primary enclosures should be large enough to allow a dog to stand on its hind legs and hold its tail aloft. While we believe a minimum enclosure height for dogs is necessary and appropriate, we do not believe that minimum requirements for the well-being of dogs need require that the animals be able to stand on their hind legs in a primary enclosure. Upon review of the comments, we believe that the recommendation that enclosures be at least 6 inches above the head of the largest dog would be reasonable and would not adversely affect the well-being of the dogs housed. We are therefore revising our proposal accordingly.

A number of commenters recommended that exemptions be made for housing of dogs in temporary enclosures that do not meet the proposed standards, as long as the dogs can stand, turn, and move about. We believe that allowing for such exemptions would lead to enforcement problems and would not be in the best interest of the dogs. We are therefore making no changes to the regulations based on these comments. Several commenters recommended that the

same requirements proposed for resting surfaces for cats be applied to dogs. We believe that the species differences between dogs and cats makes the proposed resting surface requirements for cats inappropriate for dogs and are making no changes to the proposal based on these comments.

In § 3.4(b)(2)(ii) of the current regulations, requirements are set forth for dog houses with chains used as primary enclosures for dogs kept outdoors. In § 3.6(c)(2) of the proposed regulations, we expanded those regulations, and proposed to apply the expanded regulations to dogs that are tethered by any means, and not just by chains. We proposed to retain the current requirement that a dog that is tethered be kept from being entangled, and to add the requirements that the dog not be able to come into physical contact with other dogs in the housing facility, and be able to roam to the full range of the tether. We proposed to retain the current requirement that the tether be of the type commonly used for the size dog involved, and that the tether be attached to the dog by a well-fitted collar. Additionally, we proposed to explicitly require that the collar must not cause trauma or injury to the dog. The proposed regulations included the following examples of types of collars that would be prohibited: Collars made of wire, flat chains, chains with sharp edges, and chains with rusty or nonuniform links. As in the current regulations, we proposed that the tether would have to be at least three times the length of the dog as measured from the tip of its nose to the base of its tail. We also proposed to require that the tether be attached to the front of the dog's shelter structure or to a post in front of the shelter structure, and that it allow the dog convenient access to the shelter structure and to food and water containers.

Several commenters specifically supported the proposed provisions as written. A number of commenters either opposed the use of tethers altogether or supported the use of tethers for temporary use only. We do not believe that the use of appropriate tethers is harmful to dogs. Many domestic pets are so restrained with no harmful effect. We are therefore making no changes to our proposal based on these comments. Several commenters recommended that the regulations require that tethers be at least 15 feet long, and be made of a soft but durable material that will not rot when exposed to the elements nor cause injury to the animal. We do not believe that either of the recommended changes are necessary for the well-being of dogs

and are making no changes to our proposal based on these comments.

A small number of commenters recommended that we add language to the proposal to clarify that "tether" does not refer to devices used for chronic sampling of animals during research (such as indwelling catheters.) We believe that such an interpretation is self-evident and requires no clarification in the regulations. Several commenters stated that the collar specifications for tethered animals should be placed in a separate section of the regulations so as to apply to all dogs. We are making no changes to the proposal based on these comments. Requirements for identification, including collars, for all regulated dogs and cats are included in § 2.50 of the regulations.

We proposed that dog housing areas where chains or tethers are used must be enclosed by a perimeter fence at least 6 feet in height, so as to protect the dogs, to contain them, and to keep animals the size of dogs, raccoons, and skunks from going through or under it. A number of commenters, addressing similar provisions for perimeter fences elsewhere in the regulations, stated that requiring a fence at least 6 feet high would not necessarily keep unwanted animals from entering the area occupied by the animals housed. While we continue to believe that a perimeter fence 6 feet high will in most cases be adequate to keep out unwanted species, we recognize that, depending on the configuration and location of the facility, and on the type of fence used, fences of other heights might be warranted or necessary in keeping out animals. We are therefore amending our proposal to require that, in cases where a perimeter fence is required, it be of sufficient height to keep unwanted animals out, and that it be constructed so that it protects the dogs inside by preventing animals the size of dogs, skunks, and raccoons from going through it or under it. Because we believe that in most cases it would take a fence at least 6 feet high to keep out unwanted species, we are also proposing to require that fences less than 6 feet high must be approved by the Administrator.

A number of commenters recommended that we modify our proposed provisions regarding fences to allow for local zoning regulations. We believe that any such local considerations are beyond the scope of these regulations and we do not consider it appropriate to add such provisions to the regulations.

The proposal provided that all dogs housed in the same primary enclosure would have to be compatible. We

proposed to retain the provision in current § 3.4(b)(2) limiting to 12 the number of nonconditioned adult dogs permitted to be housed in the same primary enclosure, and to set it forth in proposed § 3.6(c)(3). Additionally, that proposed paragraph contained the following provisions: Bitches in heat must not be housed in the same primary enclosure with sexually mature males, except for breeding; bitches with litters must not be housed in the same primary enclosure with other adult dogs; puppies under 4 months of age must not be housed in the same primary enclosure with adult dogs, except when maintained in a breeding colony; and dogs with a vicious or aggressive disposition must be housed separately.

A number of commenters recommended that we reduce the number of dogs permitted in one primary enclosure. Recommended maximums ranged from 4 dogs to 6 dogs. The provision allowing no more than 12 adult nonconditioned dogs in the same enclosure is contained in the current regulations. Based on our experience enforcing the regulations, we believe that allowing such a number has not been harmful to the health and well-being of the animals housed. We are therefore making no changes to the proposal based on these comments.

Several commenters recommended that we clarify the proposed regulations to indicate that puppies under 4 months of age may be housed with their dam. We believe that such a clarification is warranted and are revising our proposal accordingly.

Several commenters stated that it would be impossible to meet our proposed requirements for compatibility at facilities with rapid animal turnover. We are making no changes to our proposal based on these comments. The requirements for compatibility are similar in substance to those already being enforced under the current regulations, and we continue to believe that they are necessary for the health and well-being of the animals housed.

We proposed to provide, in § 3.6(c)(4), that dogs in mobile or traveling shows or acts may be kept, while the show or act is being transported from one temporary location to another, in transport containers that comply with all requirements of proposed § 3.14 of subpart A, other than the marking requirements in § 3.14(a)(8). We proposed that when the show or act is not traveling, the dogs would have to be placed in primary enclosures that meet the minimum requirements of § 3.6. Mobile or traveling shows and acts normally remain in one location for

several days and then move to another location, with the movement taking a day or less. Because the animals are less subject to injury in smaller enclosures while traveling, we proposed to allow the use of transport cages during this time. When stopped and not traveling, however, the dogs would have to be placed in primary enclosures that comply with the minimum space and other requirements of § 3.6. As explained above, we also proposed similar provisions regarding cats in mobile or traveling shows or acts. No commenters addressed these provisions and we are making no changes to § 3.6(c)(4) of our proposal.

Innovative Primary Enclosures for Dogs and Cats

We encourage the design and development of primary enclosures that promote the well-being of dogs and cats by providing them with sufficient space and the opportunity for movement and exercise. Accordingly, we are providing in this revised proposal that innovative primary enclosures not precisely meeting the floor area and height requirements provided for dogs and cats, but that do provide the dogs and cats with a sufficient volume of space and the opportunity to express species-typical behavior, may be used at research facilities when approved by the Committee, and by dealers and exhibitors when approved by the Administrator.

Variances From Minimum Space Requirements—Section 3.6(d)

In § 3.6(d) of our proposed rule, we proposed procedures whereby variances from the proposed regulations could be requested, and, if justified, approved by the Administrator. Under our proposal, such variances would allow an eligible registrant or licensee to continue operating, even though not fully in compliance with the proposed space requirements in Subpart A. Under our proposal, a variance would be limited in scope both as to time and to the primary enclosures covered by it, and would specify the portions of the applicant's facilities to which it applies. In this revised proposal, we are not including provisions for variances. In light of the removal of many of the space requirements in our original proposal that differed from the current regulations, and in light of the availability of primary enclosures meeting our proposed minimum space standards, we do not believe that it is necessary or appropriate to provide for variances from the proposed provisions.

Exercise and Socialization for Dogs—Section 3.7

In accordance with the 1985 amendments to the Act, in developing our proposed rule, we set forth standards for the exercise and socialization of dogs, and proposed a new § 3.7, titled "Exercise and socialization for dogs." The amendments we propose regarding exercise for dogs are a critical component of our rewriting of the animal welfare regulations, and constitute an area where we specifically directed by statute to address. Many of the provisions regarding exercise in our proposal were predicated on the premise that the increase of space available to dogs will predictably result in a concomitant increase in exercise activity. Thus, our proposed rule contained very specific guidelines for area dimensions governing exercise requirements.

The response from the public to our proposed exercise requirements was voluminous and intensive. We have carefully reviewed each of the comments received. Additionally, we have continued our ongoing analysis of all research information available regarding the exercise and socialization of dogs, and have continued our statutorily mandated consultation with other Federal agencies.

The scientific evidence available to us now leads us to conclude that space alone is not the key to whether a dog is provided the opportunity for sufficient exercise. Based on the comments received, discussed below, and the other research information available, it appears that additional space provided to certain dogs would be underutilized—i.e., even if released into a relatively large run, many dogs will find a corner and lie down. The evidence available to us indicates that certain dogs can receive sufficient exercise, even in cages of the minimum size mandated by the regulations, if they are given the opportunity to interact with other dogs or with humans.

Because of the wide variation in behavioral characteristics of different breeds, and of individual animals within breeds, we do not believe that our proposed "across-the-board" standards are the most appropriate way of ensuring that dogs in regulated facilities receive sufficient opportunity for exercise. We believe that it is possible to provide such opportunity in a variety of ways, or a variety of combinations of ways. We believe that each facility should be responsible for developing a written plan to ensure that each dog in the facility has the opportunity for adequate exercise, and that such plan

must be made available to APHIS. We discuss these provisions in more detail below.

Intimately connected with the issue of exercise for dogs is the issue of the animals' socialization. The research data available, and in large measure simple observation, indicate that dogs given the opportunity to interact are more active than dogs housed individually. In short, social interaction among dogs is an effective means of promoting exercise. In those cases in which social interaction is lacking, other means of promoting exercise are necessary for the dogs' well-being and would be required under this revised proposal. Whatever the means developed, the guiding requirement would be that the dogs receive opportunity for sufficient exercise.

A very large number of commenters supported the concept of requiring the exercise of dogs. A very large number of commenters took an opposing view, and recommended that all provisions for exercise and socialization of dogs be removed from the regulations. The responsibility for establishing standards for the exercise of dogs is one that we are charged with by Congress, and is one that we must meet. In doing so, we take seriously our obligation to promote the well-being of the animals protected by the regulations. As discussed above, socialization is one means of promoting exercise.

Although the issue of the socialization of dogs is closely connected with the exercise of dogs, and many commenters addressed the two issues in tandem, the provisions were set forth separately in our proposal. In this supplementary information, we will address the comments responding to each issue separately.

Social Contact for Dogs—Section 3.7(a)

Under the provisions for social contact in proposed § 3.7(a), we set forth the requirement that all dogs housed, held or maintained by any dealer, exhibitor, or research facility be maintained in compatible groups. We proposed exceptions to this provision, however, for certain situations that involve either the provisions of an animal care and use procedure approved by a research facility's Committee, or the health and well-being of the dogs. Because of the social nature of dogs, we also proposed to require, with similar exceptions, that all dogs be able to see and hear other dogs. We proposed to require that a dog unable to see and hear other dogs, simply because it is the only dog in a facility, receive positive physical contact with humans

at least once a day. A number of commenters asked that we define "positive physical contact." "Positive physical contact" is defined in part 1 as "petting, stroking, or other touching, which is beneficial to the well-being of the animal." We proposed that this contact would have to total at least 60 minutes each day and could be given in one or more periods.

A small number of commenters specifically supported the proposed provision that all dogs be maintained in compatible groups. A much greater number of commenters opposed this provision. Those opposing the provision stated that: the proposed provision was arbitrary and lacking in scientific documentation; group housing could lead to fighting and the spread of disease; group-housed dogs pose a potential danger to personnel; housing dogs in groups can cause psychological distress to the animals; the Act does not specifically require the socialization of dogs; and bitches in whelp should be isolated from other dogs. A number of commenters stated that housing dogs in groups could interfere with research procedures at research facilities.

We do not agree that the regulations we proposed regarding group housing would interfere with research procedures. The regulations in § 2.38(k)(1) of Part 2 provide that exceptions to the standards in Part 3 may be made when such exceptions are specified and justified in the proposal to conduct an activity and are approved by the research facility's Committee. We believe that the remainder of the concerns expressed by the commenters are addressed by the provisions of this revised proposal. As stated above, we continue to believe that group housing of dogs is an effective and efficient means of providing the dogs the opportunity for adequate exercise. However, in cases where a facility chooses not to house all dogs in groups, or where certain dogs are housed individually for research reasons, the facility will be responsible under the provisions of this revised proposal for developing a program of alternatives to group housing to provide the dogs adequate opportunity for exercise, as discussed below.

One of the reasons we included in our proposal for not housing a dog with other dogs was the case where a dog exhibits vicious or aggressive behavior. Several commenters recommended that the regulations require that facilities make attempts to socialize such animals. We do not believe that such a requirement would be practical or within the scope of our authority. In this revised proposal, we are continuing to

include dogs exhibiting vicious or aggressive behavior as those inappropriate for group housing.

In this revised proposal, provisions for group housing would be set forth in proposed § 3.7(b), and would allow dogs over 12 weeks of age to be maintained in compatible groups unless (1) housing in compatible groups is not in accordance with a Committee-approved research proposal at a research facility; (2) in the opinion of the attending veterinarian, such housing would adversely affect the health or well-being of the dog(s); and, (3) a dog exhibits aggressive or vicious behavior.

A large number of commenters addressed the proposed provision that all dogs be able to see and hear other dogs, except for reasons of health or well-being, approved research, or the fact that a dog is housed singly in a facility. Linked to these responses were those addressing the proposed requirement that dogs housed singly in a facility receive at least 60 minutes of positive physical contact each day. A small number of commenters specifically supported each of the provisions as written. A much larger number of commenters addressed only the requirement for positive physical contact. Of these commenters, many recommended that all dogs receive daily positive physical contact. Many others recommended that puppies receive positive physical contact and socialization from the fifth through the twelfth week of life. A small number of commenters either opposed the requirement for sensory contact among dogs, or recommended that the need for sensory contact be determined by the attending veterinarian. Many commenters opposed the proposed requirement that a dog lacking sensory contact with other dogs because it is the only dog at a facility be provided with at least 60 minutes of positive physical contact each day. Many commenters stated that the 60 minute minimum was arbitrary and lacking in scientific documentation, and recommended that the proposed provision be amended to simply require human contact once or several times a day. Several commenters stated that the socialization needs of dogs can be met only if two or more dogs have complete body contact. A small number of commenters expressed concern that requiring positive physical contact could create a human/animal bond that could lead to psychological problems for the caretaker.

As we discussed above, in developing our proposed regulations, we were guided by our statutory mandate to

establish standards for the exercise of dogs. Also as stated above, we believe that socialization of dogs, including sensory contact, is the single most effective means of providing the opportunity for adequate exercise. Based on the evidence presented to us, however, we do not believe that it is essential for the health and well-being of dogs that they have sensory contact with other dogs, and do not believe that it is appropriate to include such a provision in the regulations as a required minimum standard. We are therefore not including the provisions of proposed § 3.7(a)(2), regarding sensory contact, in this revised proposal. We continue to believe, however, that dogs housed singly in facilities need regular interaction with humans, and are proposing in § 3.7(b)(1) of this revised proposal that if only one dog is housed, held, or maintained at a facility, the single dog must receive positive physical contact with humans at least daily.

A number of commenters expressed reservations concerning the group housing of dogs, stating that the behavior of dogs in packs is unpredictable and dangerous. While we agree that such dangerous behavior is frequently observed in animals that roam at large, we do not believe it is a significant problem with dogs that are in captivity and subject to human care and control. In cases where individual dogs exhibit aggressive or vicious behavior, the proposed regulations would provide for solitary housing of such animals.

A small number of commenters opposed what they considered "loopholes" in the proposed regulations that would allow research facilities to house animals in isolation, when the need for such housing is set forth in a research proposal approved by the facility's Committee. We are making no changes to our proposal based on these comments. Our mandate to establish and enforce Animal Welfare regulations under the Act makes it clear that the regulations shall not impede research efforts.

Exercise and Socialization—Section 3.7(b)

We set forth provisions for the release of dogs for exercise and socialization in proposed § 3.7(b). With certain exceptions that are explained below, we proposed to require that the following categories of dogs, if housed, held, or maintained by any dealer, exhibitor, or research facility, be released at least once a day for exercise and socialization: (1) Dogs that are kept in individual cages or that are kept individually in pens or runs that provide

less than four times the space required for that dog, and that do not allow visual and physical contact with other dogs; and (2) housed, held, or maintained in groups that are not provided with the greater of 80 sq. ft. of space or 150 percent of the minimum space required for all dogs in the group.

Under the proposal, however, dogs housed, held, or maintained individually would not have to be released if kept in pens or runs that provide at least four times the required space for that dog, and that allow the dogs visual and physical contact with other dogs. Also, in certain cases, the approval animal care and use procedure might prohibit the dogs' release for exercise and socialization. In those cases, we proposed that the dogs would have to be maintained in pens or runs that provide each dog with at least twice the minimum floor space set forth in § 3.6(c)(1) of the proposed subpart with regard to primary enclosures. We proposed that the exercise area would have to be at least 80 square feet, except that the area would have to provide each dog with at least twice the minimum floor space required by proposed § 3.6(c)(1).

As proposed, dogs housed, held, or maintained in groups would not have to be released for exercise if the dogs are maintained in pens or runs that provide the greater of 80 square feet or 150 percent of the space each dog would require under proposed § 3.6(c)(1) if maintained separately. We proposed that the exercise area would have to be the greater of 80 square feet or 150 percent of the minimum space requirement in § 3.6(c)(1), as calculated for all dogs in the exercise area.

We proposed that the exercise period for all dogs released for exercise would have to be at least 30 minutes each day, and could be provided in one or more release periods. We based that minimum on the consensus of APHIS veterinarians with training and experience in the care of dogs that 30 minutes of daily exercise is a reasonable minimum for maintenance of a dog's health and well-being.

A very large number of commenters addressed the proposed provisions regarding exercise. As noted above, many commenters, without addressing specific proposed provisions, expressed support for exercise requirements for dogs. Conversely, a large number of commenters opposed the inclusion in the regulations of any requirements regarding exercise. Many other commenters supported the concept that dogs must be provided the opportunity for exercise, but recommended modifications to the proposed

provisions. A small number of commenters specifically supported the proposed provisions as written.

Of the commenters recommending modifications to the proposed exercise requirements, a large number recommended increases in exercise space and length of exercise period. A much greater number of commenters stated that the proposed space requirements, frequency of exercise, and length of exercise period were excessive and without scientific documentation. A number of commenters stated that exercise requirements differ for different breeds of dogs. Others recommended that exercise requirements for the dogs in each facility be determined by the facility's attending veterinarian. Several commenters recommended that the regulations require that all dogs kept in enclosures that provide the minimum amount of floor space be exercised daily. A number of commenters recommended that the regulations provide exemptions from the proposed exercise requirements for bitches with puppies or due to whelp, or in cases of assisted breeding. A small number of commenters recommended that dogs acclimated to the currently required enclosure sizes be exempted from the proposed exercise requirements. Several commenters stated that space configuration was more important than square footage in determining exercise area.

We have carefully reviewed each of the comments submitted regarding the exercise requirements contained in our proposal. We have also continued our ongoing analysis of current scientific literature regarding exercise requirements for dogs. Based on the evidence available to us, we believe that it is appropriate to modify our proposed requirements regarding exercise for dogs. Of the data available, the most conclusive indicates that area dimensions alone are not a reliable indicator of how much a dog will exercise. As discussed above, large areas do not guarantee exercise, nor do smaller areas preclude it. We believe that effective methods of ensuring that dogs receive adequate exercise can most appropriately be developed on a facility-by-facility basis, based on the judgment of the attending veterinarian. We are therefore proposing in § 3.7(c)(4) of this revised proposal that written standard procedures for provision of the opportunity for exercise must be prepared by each dealer, exhibitor, or research facility at which dogs are housed, held, or maintained. We are providing that this set of procedures would have to be made available to APHIS, and, in the case of research

facilities, to officials of any pertinent funding Federal agency.

We provide in § 3.7(c)(a) of this revised proposal that, under the operating procedures we are proposing to require, dogs over 12 weeks of age, except bitches with litters, housed, held, or maintained in a regulated facility must be provided the opportunity for exercise regularly if they are kept individually in cages, pens, or runs that provide less than two times the required floor space for that dog, as indicated in proposed § 3.6(c)(1). In § 3.7(b) of this revised proposal, we provide that dogs over 12 weeks of age would not require additional opportunity for exercise regularly if they are housed, held, or maintained in groups in cages, pens, or runs that provide at least 100 percent of the recommended space for each dog if maintained separately.

Methods of Exercise for Dogs—Section 3.7(c)

Section 3.7(c)(1) of this revised proposal provides that exact methods and periods of providing the opportunity for exercise must be determined by the attending veterinarian, with, at research facilities, consultation with and review by the Committee. We are providing in § 3.7(c)(2) of this revised proposal that the opportunity for exercise may be provided in a number of ways, such as: (1) Group housing in cages, pens, or runs that provide at least 100 percent of the space required for each dog under the minimum floor space requirements set forth in proposed § 3.6(c)(1); (2) maintaining individually housed dogs in cages, pens, or runs that provide at least twice the minimum floor space required by proposed § 3.6(c)(1); (3) providing access to a run or open area; (4) providing positive physical contact with humans through play, grooming, petting, or walking on a leash; or (5) other similar activities.

A small number of commenters stated that exercise provisions in the regulations should not apply to dogs held for less than 2 weeks. We believe that the exercise needs of a dog do not necessarily depend on how long it is held in a facility, and that such an across-the-board exemption for dogs held less than 2 weeks would be inappropriate.

Although the proposal did not prohibit exercise by such means as treadmills, carousels, or swimming, it did specify that such methods would not be considered as meeting the exercise requirements of the proposed regulations. A number of commenters stated that such a restriction was unjustified. We disagree, and are

specifying in this revised proposal that such means of exercise would not be considered as meeting the exercise requirements of this revised proposal. Congressional intent with regard to the Act was to give dogs an opportunity for exercise, not to force them to exercise.

Record of Exercise—Section 3.7(d)

Under § 3.7(d) in our original proposal, the licensee or registrant would have been required to keep a record of each dog's release for exercise, with these records subject to APHIS inspection. Many commenters specifically supported this provision. A much larger number of commenters opposed such a requirement. Because written procedures for exercise for dogs would otherwise be required by this revised proposal, we are not including a requirement that records be kept of each dog's release for exercise.

Exemptions from Exercise—Section 3.7(e)

In our proposed rule, we stated that we recognize that certain situations would require an immediate response from facility personnel when a dog's welfare requires that it be provided less than the minimum standards for release for exercise. We therefore included a provision in proposed § 3.7(e) to authorize an attending veterinarian to exempt or restrict a particular dog from its required exercise and social release period, if he or she determines that it is necessary to do so for the dog's health, condition, or well-being. As proposed, the exemption would have to be recorded by the attending veterinarian, who would be required to review the grant of exemption at least every 30 days to determine if it is still warranted.

A large number of commenters stated that the recording of exemptions was unnecessary and should not be required. A small number of commenters stated that the regulations should allow exemptions for certain study situations without requiring documentation. We believe that such records are necessary for proper enforcement of the regulations and are including a provision in § 3.7(d)(3) of this revised proposal that records of any exemptions must be maintained and be made available to USDA officials upon request, and, in the case of research facilities, be made available to any pertinent funding Federal agency. In the case of research exemptions, § 2.38(k)(1) of the regulations provides that exceptions to the standards in Part 3 may be made only when such exceptions are specified in the proposal to conduct the activity and are approved by the research facility's Committee.

In § 3.7(d)(2) of this revised proposal, we are adding language regarding exemptions to those provisions regarding exemptions in our original proposal, to clarify that exemptions may be made at research facilities for research purposes. In that paragraph, we are providing that a research facility may be exempted from meeting the proposed exercise requirements for certain dogs, if the principal investigator determines for scientific reasons set forth in a research proposal that it is inappropriate for those dogs to exercise. In such cases, the exemption would have to be documented in the Committee-approved proposal, and would have to be reviewed at appropriate intervals as determined by the Committee, but not less than annually.

Definitions and Use of Terms

A small number of commenters asked that we define "exercise" and "socialization." We do not believe that such definitions are necessary. In general, we believe the standard dictionary meanings of the two words would be sufficient in complying with the regulations. One commenter stated that socialization and exercise should be addressed as separate provisions in the regulations. While we agree that socialization and exercise can be two separate activities, for the purposes of the regulations we believe they are often closely linked. In many cases socialization stimulates exercise. We therefore believe it is appropriate in this revised proposal to discuss socialization in the context of the proposed requirements for an exercise program for dogs.

A number of commenters requested that, for clarity's sake, we reword certain of the proposed provisions regarding exercise or define certain other terms. We believe that the changes we have incorporated in this revised proposal address these commenters' concerns.

Feeding—Section 3.8

In proposed § 3.8(a), concerning feeding requirements for dogs and cats, we proposed to make minor changes to the feeding requirements in current § 3.5(a). In addition to the current provisions, we proposed to require that food given to a dog or cat be appropriate for the animal's age.

We proposed to make minor additions in § 3.8(b) to clarify that food receptacles must be used for dogs and cats, and must be located so as to minimize contamination by pests as well as by excreta, and so as to be protected from rain or snow. Under the proposal,

feeding pans would either have to be made of a durable material that can be easily cleaned and sanitized, or be disposable and discarded after each use. We proposed to require that food containers that are not discarded be cleaned daily and be sanitized before being used to feed a different dog or cat or social grouping of dogs or cats, and, as currently required, be sanitized at least once every two weeks. Under the proposal, self-feeders for the feeding of dry food would have to be cleaned and sanitized regularly, and measures would have to be taken to prevent molding, deterioration, and caking of the food. We provided that any of the sanitization methods allowed in proposed § 3.10(b)(3) could be used for the sanitization required in proposed § 3.8.

A number of commenters specifically supported the provisions of proposed § 3.8 as written. A large number of commenters stated that it would be impossible to ensure that all animals will have access to food in group housing situations. We believe that whatever practical problems might have to be met to provide each dog access to food each day, they cannot justify ignoring the feeding needs of the animals housed in a facility, and we are making no changes based on these comments. Several commenters recommended that multiple feeding sites be provided for animals housed in groups. We believe that the provisions as proposed are adequate with regard to this concern. If certain dogs or cats are not eating because of lack of access to a feeding site, then multiple feeding sites could be one solution. Whatever the mechanism for ensuring it, however, the end result must be that each animal is fed daily.

A large number of commenters stated that, in group housing, there is no way to ensure that food will remain uncontaminated. We are making no changes to our proposal based on these comments. While we agree that the food might not always remain clean after it is offered to the dogs or cats, it is possible and necessary to ensure that the food is in appropriate condition at the time it is offered.

A large number of commenters recommended that the regulations specify that dogs and cats be fed once a day if food is not continuously available. We do not believe that the suggested wording is necessary to clarify the intent of the proposed provision and are making no changes based on the comments.

Several commenters stated that the regulations should require that weaned puppies and kittens up to the age of 16

weeks be fed solid food 3 times a day, with feeding frequency reduced to twice daily after 18 weeks of age. While we encourage giving such dogs individual attention wherever possible, we do not believe that it is necessary to the health and well-being of such animals to require in each case that they be fed more frequently than once a day. We believe further that the needs of these animals would be met by the requirement in the proposed regulation that the diet provided be appropriate for the animal's age and condition, and that the food provided be of sufficient quantity and nutritive value to maintain the normal condition and weight of the animal.

A number of commenters stated that it is inconsistent to require that nondisposable food receptacles be cleaned daily and sanitized every two weeks, while requiring that self-feeders need be cleaned only as needed. In setting forth in the proposal cleaning and sanitization requirements for receptacles and self-feeders, our guiding purpose was to ensure that all such feeding devices remain clean and sanitary enough not to pose a health risk to the animals using them. Upon review of the comments addressing this issue, we are modifying our proposed provisions regarding such cleaning and sanitization. In § 3.8 of this revised proposal, we are proposing to require that both nondisposable food receptacles and self-feeders be kept clean, and be sanitized in accordance with § 3.10(b) of this revised proposal, which would require that they be sanitized at least once every two weeks, as often as necessary to keep them clean and free from contamination, and before being used to feed another dog or cat or social grouping of dogs or cats. In cases where groups of dogs or cats are housed together, it would not be necessary to sanitize the receptacle between each feeding by a different dog or cat, but rather between use by different social groups.

Several commenters recommended that we require that contamination of food be prevented, rather than minimized. We do not believe that such a requirement would be practicable and are making no changes based on these comments.

Watering—Section 3.9

Currently, § 3.6 contains provisions for offering liquids to dogs and cats and for the cleaning and disinfection of watering receptacles. Under § 3.9 of the proposed rule we proposed to continue to require that potable water be offered at least twice daily, if it is not continually available, and proposed to

add the requirement that water receptacles be sanitized before being used to water a different dog or cat or social grouping of dogs or cats.

A small number of commenters specifically supported these provisions as written. A number of commenters recommended that potable water be available to dogs and cats at all times, unless restricted by a veterinarian, or in times of excessive heat. A small number of commenters recommended that the regulations require that water be provided at least four times daily for a minimum of 1 hour each time. Based on our experience enforcing the regulations we believe that two 1-hour periods of watering are sufficient to meet the needs of dogs and cats, and are making no changes to the proposal based on these comments.

A number of commenters recommended that cleaning of water receptacles be required according to timetables, and that sanitization be required more often than every 2 weeks as proposed. We do not believe that such additional cleaning and sanitization is necessary and are making no changes based on these comments. A number of commenters also recommended that the regulations require that water receptacles be of such construction so as not to cause injury or discomfort to the dogs and cats. Based on our experience enforcing the regulations, we do not believe the commenters' concern has been a practical problem and are making no changes based on these comments.

Cleaning of Primary Enclosures—Section 3.10(a)

We proposed to revise and reword the provisions in current § 3.7, and to include them in proposed § 3.10, to clarify the intended requirements for sanitation and other forms of hygiene. We proposed to title the revised section "Cleaning, sanitization, housekeeping, and pest control."

In § 3.10(a) of our proposal, we proposed to require that excreta and food waste be removed from primary enclosures or from under primary enclosures at least daily and as often as necessary. We proposed to apply this cleaning requirement to all types of housing facilities and to primary enclosures with grill-type floors, and to the ground areas under raised runs with wire or slatted floors. In our proposed rule, we stated that our experience indicates that daily cleaning is necessary to prevent the accumulation of feces and food waste and to reduce disease hazards, pests, insects, and odors. We also proposed to require that when a primary enclosure is cleaned by

steam or water, any dog or cat in the enclosure be removed during the cleaning process, to prevent the animal from being involuntarily wetted or injured. Additionally, we proposed to require that all standing water must be removed from the primary enclosure, and animals in other primary enclosures must be protected from being contaminated with water and other wastes during the cleaning.

A number of commenters supported the proposed provisions as written. A large number of commenters opposed the proposed provision that would require dogs and cats to be removed from primary enclosures that are being cleaned by steam or by hosing or flushing with water. Many of the commenters stated that certain caging designs protect the animals from being involuntarily wetted when cleaning is carried out, and that removing the animals when water or steam is used is impractical and unnecessary. Upon review of the comments regarding this issue, we believe that in some cases the practical and safety problems associated with removing dogs and cats from cages would outweigh the benefits of removing the animals when cleaning using steam or water is carried out. We are therefore revising our proposal at § 3.10(a) to require that when using water to clean a primary enclosure, whether by hosing, flushing, or other method, a stream of water must not be directed at a dog or cat. Additionally, the revised proposal would provide that when steam is used to clean a primary enclosure, dogs and cats must be removed or adequately protected to prevent them from being injured.

A number of commenters stated that it is not necessary for the health and well-being of dogs and cats that areas in and under primary enclosures be cleaned daily. Some of these commenters recommended that the attending veterinarian decide how often a primary enclosure should be cleaned. While we do not agree that frequency of cleaning is a decision that need be made by the attending veterinarian, upon review of the comments we believe that certain modifications are justified regarding the proposed provisions concerning cleaning and sanitization. We continue to believe that it is necessary to remove excreta and food waste from primary enclosures daily. However, in those areas with which the dogs and cats do not have contact, specifically areas underneath the primary enclosures, we believe that daily cleaning may not be necessary. We are therefore providing in § 3.10(a) of this revised proposal that excreta and food waste must be removed from

primary enclosures daily, and from under primary enclosures as often as necessary to prevent an excessive accumulation of feces and food waste, to prevent soiling of the dogs and cats contained in the primary enclosures, and to reduce disease hazards, insects, pests, and odors. We are also providing in this revised proposal that the pans under primary enclosures with grill-type floors, and the ground areas under raised runs with wire or slatted floors must be cleaned as often as necessary to prevent accumulation of feces and food waste and to reduce disease hazards, insects, pests, and odors.

Many commenters recommended that the proposed regulations include a provision for removal of waste material "as soon as possible and reasonable" in cases where ice or snow make it impossible to remove waste material. We do not believe that it would be appropriate or necessary to develop general animal welfare standards based on specific weather conditions.

A large number of commenters objected to our proposed provision that all standing water be removed from primary enclosures, stating that it would be virtually impossible to remove all traces of water after cleaning. Many commenters stated that many dogs enjoy playing in water. We continue to believe that the removal of standing water is an important element of good housekeeping practices. Upon review of the comments, however, we recognize the impracticality of requiring that all water be removed, and are revising our proposal accordingly.

Many commenters recommended that we define the word "cleaning." We believe that the dictionary definition of the word "cleaning" adequately conveys our intent and are making no change to our proposal based on these comments. We also believe that the changes we have made in this revised proposal in response to other comments will address the areas the commenters may have found confusing.

Sanitization of Primary Enclosures and Food and Water Receptacles—Section 3.10(b)

As proposed, the provisions of proposed § 3.10(b) regarding sanitization of primary enclosures and food and water receptacles were basically the same as those in § 3.7(b) of the current regulations. Additionally, we proposed to make minor editorial changes to the current regulations.

Consistent with changes explained elsewhere in this revised proposal, we are adding wording in proposed § 3.10(b)(2) to indicate that used food and water receptacles, as well as

primary enclosures, must be sanitized at least once every two weeks, and before being used to feed or water another dog or cat.

A large number of commenters supported the provisions of proposed § 3.10(b) as written. Several commenters stated that the regulations should require sanitization of primary enclosures for dogs and cats at least every 7 days, rather than at least every 2 weeks as proposed. Based on our enforcement of the current regulations, we believe that sanitization at least every two weeks is sufficient to help ensure the health and well-being of the animals, and are making no changes to our proposal based on these comments. Proposed § 3.10(b) would require sanitization at least every 2 weeks, and more often if necessary. Many commenters expressed concern that the phrase "more often if necessary" was subjective and could lead to disagreements as to what is necessary. While we agree that the term "more often if necessary" is itself open-ended, it is followed in the proposed regulations by the phrase "to prevent an accumulation of dirt, debris, food waste, excreta, and other disease hazards." We believe that such wording is sufficiently specific. A number of commenters recommended wording and formatting changes in proposed § 3.10(b)(2). We believe that the language as proposed is clear and understandable and are making no changes based on these comments.

Proposed § 3.10(b)(3) contains specific methods of sanitization that would be considered adequate to meet the sanitization requirements of the proposed regulations. These methods are the same as those in the current regulations. Many commenters stated that these provisions are overly specific and restrictive. Based on our experience enforcing the regulations, we have found that requiring the methods of sanitization listed has resulted in effective sanitization. However, we recognize that new products with the same effectiveness as those listed may be or may become available. We are therefore revising our proposal to allow the use of detergent/disinfectant products that accomplish the same purpose as the detergent/disinfectant procedures specified in our original proposal.

In proposed § 3.10(b)(4), we are including "absorbent bedding" as a material similar to gravel, sand, grass, or earth that must be sanitized by removing contaminated material as necessary. As discussed elsewhere in the supplementary information, many facilities use such absorbent bedding,

and find it superior in quality to alternative surface materials.

Housekeeping for Premises—Section 3.10(c)

In proposed § 3.10(c), we revised and reworded § 3.7(c) of the current regulations regarding housekeeping to clarify that paragraph's intent. The current regulations require that premises be kept free of trash accumulations and be kept clean enough and in good enough repair to protect the animals and facilitate the husbandry practices required by Part 3 of the regulations. We proposed to retain the current requirements, but also to add language to clarify that one of the aims of the housekeeping provisions is to keep premises rodent-free. Additionally, we proposed to specify the following as good housekeeping practices: Premises would have to be kept free of accumulations of trash, junk, waste products, and discarded matter such as wood, bricks, and abandoned cars; weeds, grasses, and bushes would have to be controlled so as to facilitate cleaning and pest control, and to protect the dogs' and cats' health and well-being from hazards such as fox tails, burrs, sharp twigs, and fires.

A number of commenters supported these provisions as written. A larger number of commenters stated that applying the proposed housekeeping requirements to the entire premises unjustifiably extended the inspector's authority beyond animal areas. We do not agree with this assertion. The proposed regulation makes it clear that one of the primary purposes of requiring good housekeeping throughout the entire premises is to minimize pest risks that could easily spread to animal areas.

Pest Control—Section 3.10(d)

The provisions of proposed § 3.10(d) regarding pest control are basically the same as those in § 3.7(d) of the current regulations. We proposed some minor revisions to simplify the language used. We also proposed to clarify that a pest control program is necessary to promote the health and well-being of the dogs and cats at a facility and to reduce contamination by pests in animal areas. The only commenters addressing the provisions of proposed § 3.10(d) supported them as written, and we are making no changes to those provisions in this revised proposal.

Employees—Section 3.11

Current § 3.8 requires that there be a sufficient number of employees to maintain the prescribed level of husbandry practices required by

Subpart A, and that husbandry practices be under the supervision of an animal caretaker with a background in animal husbandry or care. We proposed minor revisions to this section in proposed § 3.11 to make clear that this requirement is imposed upon every person subject to the regulations and that the burden of verifying and ensuring that the supervisor and other employees are appropriately qualified is on the employer subject to the regulations. We did not propose to prescribe a specific number of employees for each facility, because the number of employees needed will vary according to the size and configuration of the facility, and according to the number and types of animals housed there. Under the proposal, a facility would have to have enough employees to carry out proper feeding, cleaning, observation, and other generally accepted professional and husbandry practices.

A number of commenters supported proposed § 3.11 as written. Many commenters objected to the proposed provisions, and stated that inspectors and government administrators are not qualified to tell facilities that they do not have enough employees. We are making no changes based on these comments. As we stated above, whether a facility has enough employees would be determined on a case-by-case basis. We believe that such a determination can be made based on an evaluation of common practices regarding facilities of a particular size or nature, and on simple observation of whether the regulations are being complied with.

In this revised proposal, we are making a minor change to remove the requirement that the supervisor be an animal caretaker. However, under this revised proposal, the supervisor would still have to meet the other qualifications set forth in our original proposal.

Social Grouping—Section 3.12

We proposed to slightly revise current § 3.9 regarding social grouping of dogs and cats in order to reduce the stress suffered by certain dogs and cats. Under proposed § 3.12(d), dogs and cats could be maintained together in the same primary enclosure, or be maintained in the same primary enclosure with other species of animals, if they are compatible. The present regulations require that dogs and cats be kept separate from each other, and from other animals, regardless of how well they get along together, or whether they are distressed by separation because they have been raised together and are compatible. Under the proposal, if dogs

and cats are not compatible with each other or with other animals, keeping them in the same primary enclosure would continue to be prohibited. A number of commenters supported the proposed provisions as written.

Section 3.12(c) of the proposal provides that puppies or kittens 180 days of age or less may not be housed in the same primary enclosure with adult dogs or cats, other than their dams, except when permanently maintained in breeding colonies. Many commenters correctly noted that this provision conflicted with the provisions in proposed § 3.6(b) and (c), which provide that puppies or kittens 4 months of age or less may not be housed with adult dogs or cats other than their dam. In this revised proposal, we are making the regulations consistent by changing "180 days" in proposed § 3.12(c) to "4 months."

Section 3.12(d) of the proposal provides that dogs or cats may not be housed in the same primary enclosure with any other species of animal, unless they are compatible. Many commenters opposed the housing of multiple species within the same primary enclosure, stating that such housing contradicts FDA and NIH guidelines. We are making no changes based on these comments. As we stated in our proposal, in some cases it would cause more stress to the animals to separate differing species than to keep them together. Such multiple-species housing would be permitted only if the animals are compatible.

One commenter objected to the proposed provisions on social grouping because they excluded the grouping of puppies with sires that exhibit beneficial paternal behavior. We do not believe that the benefits of housing adult males in the same enclosure with young puppies justify the risk to the puppies and are making no changes based on this comment.

A small number of commenters opposed what they understood in § 3.12 to be a requirement for social grouping. While we encourage social grouping in the same primary enclosure, our intent in setting forth proposed § 3.12 was not to require that social groups be formed in the same primary enclosure, but rather to ensure that whatever dogs or cats are in the same enclosure be compatible. In this revised proposal, we are modifying the wording of proposed § 3.12 to clarify that intent.

Paragraph (e) of § 3.12 in our original proposal provided that dogs and cats under quarantine or treatment for a communicable disease must be separated from other dogs and cats and

other susceptible species of animals to minimize the risk of the disease. To emphasize that the attending veterinarian should have the latitude to isolate certain animals for medical reasons, we are revising proposed § 3.12(e) in this revised proposal to provide that dogs and cats that have or are suspected of having a contagious disease must be isolated from healthy animals in the colony, as directed by the attending veterinarian. The revised paragraph would also provide that when an entire group or room of dogs and cats is known to have or believed to be exposed to an infectious agent, the group may be kept intact during the process of diagnosis, treatment, and control.

Transportation Standards

Consignments to Carriers and Intermediate Handlers—Section 3.13

We proposed to expand the current obligations imposed upon carriers and intermediate handlers (defined in Part 1 of the regulations) to ensure the well-being of dogs and cats during transport in commerce. Certain prerequisites must be satisfied before carriers and intermediate handlers may accept dogs and cats for transport in commerce. Additionally, the carriers and intermediate handlers have certain duties to fulfill after the shipment has reached its destination. Various obligations are presently contained in current §§ 3.11 and 3.14. We proposed to consolidate them in one section, proposed § 3.13, and to add some additional ones necessary for the dogs' and cats' welfare.

We proposed to remove from the regulations the requirement that certifications accompanying shipments of dogs and cats include an "assigned accreditation number" (as provided in current § 3.11(c)(4)), because a program under which accreditation numbers are assigned has not been implemented.

A number of commenters expressed concern that the proposed regulations regarding transportation standards would significantly increase animal transit time. Some commenters estimated that the proposed regulations would quadruple transit charges. Others stated that the proposed regulations would eliminate the transport of animals by air. However, the commenters did not supply data to support these assertions. The purpose of amending the regulations is to help ensure the health and well-being of dogs and cats. In the absence of data indicating that other factors should override specific measures proposed to achieve this goal,

we are making no changes to our proposal based on these comments.

Among the current regulations retained in proposed § 3.13(a) was the provision that carriers and intermediate handlers must not accept a dog or cat for transport in commerce more than 4 hours before the scheduled departure time of the primary conveyance. A number of commenters supported this provision as written. A small number of other commenters recommended that the current 4-hour period be shortened to 2 hours. Based on our experience enforcing the regulations, we do not believe that the 4-hour period is unreasonable or a threat to the well-being of the animals. We are therefore making no changes to our proposal based on these comments.

In proposed § 3.13(b), we provided that carriers and intermediate handlers must not accept a dog or cat for transport in commerce unless they are provided with the name, address, and phone number of the consignee. A number of commenters supported this provision as written. A small number of commenters stated in general that proposed § 3.13(b) should be reevaluated, or stated more specifically that, because animal shipments are usually picked up at an airport, the name, address, and telephone number of the consignee should be optional. We continue to believe that such information is necessary for those situations where the consignee for some reason fails to take receipt of the animal, and are making no changes based on these comments.

Section 3.13(c) of the proposal included the requirement that written instructions concerning food and water requirements for each dog and cat in the shipment be securely attached to the outside of the primary enclosure before a carrier or intermediate handler can accept it for transport. This requirement is contained in current § 3.14(d). The proposal provided that instructions would have to be easily noticed and read. The only commenters who addressed this provision supported it and we are making no changes to proposed § 3.14(d).

Current § 3.14 requires that adult dogs and cats be given food at least once every 24 hours after acceptance for transportation, and water at least once every 12 hours after acceptance for transportation. It is conceivable under these regulations that a dog or cat could have been fed up to 24 hours before being consigned for transport in commerce and would then not be offered food for another 24-hour period. To avoid this occurrence, we proposed to add a certification requirement to

proposed § 3.13(d) to require that a carrier or intermediate handler not accept a dog or cat for transport in commerce unless certification by the consignor accompanies the animal and specifies in writing the date and time each dog and cat was last provided food and water before acceptance for transport. In § 3.16, we proposed to require that the time periods for feeding and watering the dogs after acceptance for transport begin with the time of the last feeding and watering before acceptance for transport. To avoid situations where the carrier or intermediate handler would have to provide food and water immediately after accepting the animals, we proposed to require that the certification also state that the dogs and cats were provided water during the 4 hours before delivery to the carrier or intermediate handler, and were provided food during 12 hours before delivery to the carrier or intermediate handler.

A small number of commenters supported the provisions of proposed § 3.13(d) as proposed. A much larger number of commenters recommended that we change the word "during" with regard to timeframes to "within." We agree that "within" closely expresses our intent and are revising our proposal accordingly. We are also making certain nonsubstantive format changes to proposed § 3.13(d) to reduce redundancy and to improve readability. A small number of commenters opposed the requirement for certification of the last time of feeding and watering, and opposed the potential necessity of a transporter's having to feed and water the animals shipped. We continue to believe that certification is necessary for effective implementation of the regulations. Further, we do not think it is humane to the animals to remove all feeding and watering obligations from the transporter. We are therefore making no changes based on these comments.

Several commenters recommended that the certification be required to be included on the invoice accompanying the shipment. Several other commenters asked that we clarify whose responsibility it would be to provide the written certification. We are making no changes based on these comments. We do not believe it would be practical or reasonable to include feeding and watering information on the invoice. With regard to responsibility for certification, the proposed provisions make it clear such responsibility would be the consignor's. As proposed, carriers and intermediate handlers would not be allowed to accept dogs and cats for transport unless the certification

described above is signed and dated by the consignor, and the time of the execution, as well as others required in proposed § 3.13, would have to include the tag number or tattoo assigned to each dog and cat under § 2.50 of the regulations.

In proposed § 3.13(e), we proposed to retain current standards which require that carriers and intermediate handlers must not accept a primary enclosure for transport unless it meets the other requirements of subpart A, or unless the consignor certifies that it meets the other requirements of subpart A. Even if such certification is provided however, it is the responsibility of the carrier or intermediate handler not to accept for transport an animal in an obviously defective enclosure. A small number of commenters supported the proposed provisions as written. Many commenters stated that the provisions in proposed § 3.13(e) were unnecessarily wordy or redundant, or put too much responsibility on the carrier or intermediate handler. We disagree. Under the current and proposed regulations, the responsibility is shared between consignor and carrier or intermediate handler. The intent behind allowing certification that a primary enclosure meets the standards is to relieve the carrier or intermediate handler of the need to assess the performance capabilities of the primary enclosure where such assessment would be difficult or impractical. It would not relieve the carrier or intermediate handler of the responsibility to refuse acceptance of a primary enclosure that is obviously defective or damaged.

Several commenters opposed the provision allowing for certification as to the primary enclosure from the consignor, stating that the general public should not be required to supply such certification, because most enclosures used are acceptable. We are making no changes based on these comments. The provisions of proposed § 3.13(e)(1) allow but do not require certification from the consignor.

A number of commenters recommended nonsubstantive wording changes to the proposed provisions. We do not believe the recommended changes would add to the clarity of the proposed provisions and are making no changes based on these comments.

In proposed § 3.13(f), we proposed to clarify the certifications of the consignor regarding the acclimation of a dog or cat to lower temperatures than those prescribed in current §§ 3.16 and 3.17 of the regulations (included in proposed §§ 3.18 and 3.19). In proposed § 3.14(f), we proposed to clarify the provisions in

§ 3.11(c) to require that the temperatures to which a dog or cat is exposed must meet generally accepted temperature ranges for the age, condition, and breed of the animal, even if it is acclimated to temperatures lower than those prescribed in the regulations. We proposed that a carrier or intermediate handler not be permitted to expose a dog or cat to temperatures lower than those prescribed by the regulations, unless a veterinarian certifies that the animal is acclimated to such lower temperatures, and unless the veterinarian includes in the certification the minimum temperature to which the animal may be exposed.

A small number of commenters supported the provisions of proposed § 3.13(f) as written. A number of commenters opposed allowing a veterinarian to set a minimum allowable temperature for dogs and cats. Of these commenters, many recommended retaining the current regulations. Several commenters stated that allowing a veterinarian to determine the minimum temperature an animal could be exposed to would be difficult to implement without major modification to the entire airline tracking system for cargo. A number of commenters stated that no exemption to the temperature requirements in proposed §§ 3.18 and 3.19 should be made for puppies 8-12 weeks old. One commenter recommended that, even with a veterinarian's certification, no dog or cat be allowed to be exposed to temperatures lower than 35 °F (1.7 °C), and that special temperature provisions be added for puppies and kittens, and ill or aged animals. We have reviewed carefully each of the comments received regarding the proposed temperature certification requirements, and continue to believe that it is necessary for the well-being of dogs and cats being transported to allow the discretion of a veterinarian as to what temperature levels an animal can tolerate. This discretionary authority would serve as a safeguard for young puppies and kittens, and would ensure that other animals with special needs not be exposed to temperatures dangerous to their well-being. We agree, however, that it would be in the best interests of the animals being transported to require that no dog or cat being transported be exposed to temperatures lower than 35 °F (1.7 °C), except for the limited exception made in proposed § 3.19(a)(3) for movement to or from the animal holding areas of a terminal facility or a primary conveyance, and we are revising our proposal to include such a provision.

We proposed in § 3.13(g) of the proposal to retain the provision in current § 3.11(d) that requires the carrier or intermediate handler to attempt to notify the consignee of the arrival of the animal upon arrival, and every 6 hours after arrival. Under our proposal, proposed § 3.13(g) would also include limitations on how long a dog or cat can be held at a terminal facility while waiting to be picked up by the consignee. The same time limitations are imposed under Part 2 of the regulations, § 2.80, "C.O.D. shipments," so that the carrier or intermediate handler must attempt to notify the consignee for 24 hours after arrival, then must return the animal to the consignor or to whomever the consignor designates if the consignee cannot be notified. If the consignee is notified and does not take physical delivery of the dog or cat within 48 hours of notification, the carrier or intermediate handler must likewise return the animal to the consignor or to whomever the consignor designates. We also included provisions in proposed § 3.13(g) that would require that carriers and intermediate handlers continue to maintain dogs and cats in accordance with generally accepted professional and husbandry practices, as long as the animals are in their custody and control and until the animals are delivered to the consignee or to the consignor or to whomever the consignor designates. We also proposed to require that the carrier or intermediate handler obligate the consignor to pay for expenses incurred by the carrier or intermediate handler in returning the animal to the consignor.

A number of commenters recommended that the regulations require that carriers and intermediate handlers be required to notify the consignee every 2 hours after arrival of the animal, rather than every 6 hours. We do not believe that such a requirement is practical or necessary and are making no changes to our proposal based on these comments. Several commenters recommended that the regulations require that records of attempts to notify the consignee of a dog or cat's arrival be maintained on the carrier's destination copy of the airway bill. We do not believe that such a requirement would be practical and are making no changes to our proposal based on these comments.

Several commenters stated that the regulations should specify what type of care the dog or cat is to receive while awaiting pick-up at the carrier facility. We believe that the proposed provision that such animals must be cared for according to generally accepted

professional and husbandry practices makes clear the level of care that would be necessary under the proposed provisions.

Where references are made in proposed § 3.13 to tag numbers or tattoos assigned to each dog or cat under § 2.50 of the regulations, we are adding wording to make clear that identification is also required under § 2.38 of the regulations.

Primary Enclosures Used to Transport Dogs and Cats: Construction—Section 3.14

We proposed to reformat current § 3.12, which concerns primary enclosures used to transport dogs and cats, and to move those provisions to proposed § 3.14. Additionally, we proposed to revise the contents of several paragraphs in the section, and add requirements for surface transportation. When the transportation standards were rewritten in 1978 to incorporate the 1976 amendments to the Act concerning the commercial transportation of animals, the existing standards for surface transportation were inadvertently omitted. Since that time, the standards have pertained to commercial transportation by common carrier and only a few subsections have pertained to surface transportation by private vehicle. We therefore proposed to reinstate the surface transportation standards.

We proposed to require in § 3.14(a) that dogs and cats be shipped in primary enclosures. In addition to the requirements in current § 3.12(a) regarding construction of primary enclosures used for transportation, we proposed to require in § 3.14(a) that the primary enclosure be constructed so that: (1) The animal being transported is at all times securely contained within the enclosure and cannot put any part of its body outside of the enclosure in a way that could injure the animal or people; (2) any material used in or on the enclosure is nontoxic to the animal; and (3) if a slatted or wire mesh floor is used in the enclosure, it be constructed so that the animal cannot put any part of its body through the spaces between the slats or through the holes in the mesh. Our proposal specified that unless the dogs and cats are on raised floors made of wire or other nonsolid material, the primary enclosure would have to contain enough suitable, previously unused, litter to absorb and cover excreta.

A number of commenters supported the provisions of proposed § 3.14(a) as written. One commenter stated that a written certification should be required

of all regulated and licensed shippers stating that the primary enclosure meets all the requirements of proposed § 3.14(a). As discussed above, provision exists in proposed § 3.13(e) for the consignor to supply such certification, in lieu of the carrier or intermediate handler assessing the performance capabilities of the enclosure. However, we believe it would be unnecessarily restrictive to require such certification in all cases, and are making no changes based on these comments. Several commenters expressed concern that the proposed regulations would make carriers responsible for determining the suitability of litter. Carriers already have this responsibility under the current regulations, and our experience enforcing the regulations indicates that this has not posed any problems.

Primary Enclosures Used to Transport Dogs and Cats: Cleaning—Section 3.14(b)

In addition to retaining the cleaning and sanitization requirements that currently appear in § 3.12(e), we also proposed to require in proposed § 3.14(b) that if the dogs or cats being transported are in transit for more than 24 hours, either the enclosures be cleaned and the litter replaced, or other means, such as moving the animals to a different enclosure, be used to prevent the soiling of the dogs or cats by body wastes.

A large number of commenters opposed the proposed provisions regarding cleaning of the enclosures and replacement of litter. A small number of commenters recommended that such procedures be required if the animals are in transit for more than 36 hours, rather than 24 hours as proposed. Many commenters stated that requiring cleaning of enclosures and replacement of litter could create the risk of injury or escape of the animals. We continue to believe that it is necessary to the health and well-being of animals in transit that their enclosure, and their litter, be kept reasonably clean of body wastes. We are therefore retaining the provisions of proposed § 3.14(b) in this revised proposal, and are adding the provision that if it becomes necessary to remove the dog or cat from the enclosure, in order to clean or move the dog or cat to another enclosure, such procedure must be completed in a way that safeguards the dog or cat from injury and prevents escape.

Primary Enclosures Used to Transport Dogs and Cats: Ventilation—Section 3.14(c)

In proposed § 3.14(c)(1), we set forth ventilation requirements more

restrictive than those in the current regulations, by removing two of the current options for primary enclosure configurations with regard to ventilation. The current regulations allow the primary enclosures to have ventilation openings on either two, three, or four sides. We proposed to require that there be ventilation openings on each of the four walls of primary enclosures used to transport dogs and cats, and that the ventilation openings total at least 8 percent of the total surface of each wall, with the total combined surface area of the ventilation openings comprising at least 14 percent of the total combined surface area of all the walls of the primary enclosure.

A small number of commenters supported the provisions of proposed § 3.14(c)(1) as written. An equal number of commenters either opposed the proposed provisions, or requested a transition period for modification and redesign of existing enclosures. Upon review of the comments, we have reconsidered the position we put forth in the proposal. The evidence available to us indicates that the benefits of amending the current standards regarding ventilation openings on primary enclosures would be minimal in comparison to the potential disruption of existing shipping procedures. We are therefore revising our proposal at proposed § 3.14(c)(1). The provisions we are setting in this revised proposal are the same as those in the current regulations at § 3.12(a)(4), except as discussed below, and would continue to allow the use in transport of primary enclosures with ventilation openings on two, three, or four sides.

While retaining in this revised proposal the majority of the current provisions regarding ventilation openings, we are proposing one change to the current regulations. The current regulations require that at least one-third of the total minimum area required for the ventilation of primary enclosures used for transportation be located on the lower one-half of the primary enclosure, and, likewise, at least one-third be located on the upper one-half. In this revised proposal, we are including provisions to require only that at least one-third of the ventilation area be located on the upper one-half of the primary enclosure. Research conducted by the Federal Aviation Administration has indicated that it is not necessary for the animals' well-being that one-third of the openings be located on the lower one-half. In fact, research has shown that requiring openings on the lower one-half of the enclosure may be detrimental to certain dogs and cats and

other animals. Timid animals may benefit from the security provided by a solid wall in the lower one-half of the enclosure, and may be caused stress by openings on the lower one-half.

Section 3.12(h) of the current regulations requires that a primary enclosure that is permanently affixed to a primary conveyance so that the front opening of the enclosure is its only source of ventilation must face either the outside of the conveyance or an unobstructed aisle or passageway. Because primary enclosures that open directly to the outside of the conveyance may expose the animals in the enclosure to the elements, we proposed in § 3.14(c)(3) to require that enclosures with a front opening open only to an unobstructed aisle or passageway. We also proposed in § 3.14(c)(3) to require that the ventilation openings of primary enclosures permanently affixed to a conveyance be covered with bars, mesh, or smooth expanded metal having air spaces. No commenters addressed these provisions and we are making no changes to them in this revised proposal.

Primary Enclosures Used to Transport Dogs and Cats: Compatibility—Section 3.14(d)

Under the current regulations, § 3.12(b) requires that live dogs or cats transported in the same primary enclosure be of the same species and be maintained in compatible groups. We proposed to retain this wording in proposed § 3.14(d), with the added provision that dogs and cats that are private pets, are of comparable size, and are compatible, may be transported together in the same primary enclosure. As we stated in our proposal, based on our observations of shipments of dogs and cats and on information received from pet owners and dealers, we have determined that shipping companion animals individually may cause them more stress than shipping them together.

We also proposed in § 3.14(d) that: (1) Puppies or kittens 180 days of age or less may not be transported in the same primary enclosure with adult dogs or cats other than their dams; (2) dogs or cats that are aggressive or vicious must be transported individually in a primary enclosure, and (3) female dogs or cats in season (estrus) must not be transported in the same primary enclosure with any male dog or cat.

A number of commenters supported the provisions of § 3.14(d) as written. Several commenters objected that the proposed provisions would unjustifiably place the burden of determining compatibility on the carrier. Carriers already have this responsibility under

the current regulations, and our experience enforcing the regulations indicates that this has not posed any problems.

One commenter correctly noted that the provision in proposed § 3.14(d)(2), prohibiting puppies or kittens 180 days of age or less from being transported in the same primary enclosure with adult dogs or cats other than their dams is inconsistent with § 3.6(b)(2) and (c)(3), which refers to puppies and kittens 4 months of age or less. To make the regulations consistent, we are changing the reference to "180 days" in proposed § 3.14(d)(2) to read "4 months."

Primary Enclosures Used to Transport Dogs and Cats: Space and Placement—Section 3.14(e)

We proposed to retain the requirement in current § 3.12(c) that each dog or cat transported in a primary enclosure have sufficient space to turn about freely in a standing position, and to sit, stand, and lie in a natural position, and we proposed to move that requirement to proposed § 3.14(e)(1). No commenters addressed these provisions and we are making no changes to them in this revised proposal.

Primary Enclosures Used to Transport Dogs and Cats: Transportation by Air—Section 3.14(f)

Because certain requirements for primary enclosures used in surface transportation were omitted from the 1978 revisions to the regulations, the provisions in current § 3.12(d) regarding the number of animals that may be transported in a primary enclosure are designed only for air transportation. We therefore proposed to set forth the provisions of current § 3.12(d), with some amendments, in proposed § 3.14(f), titled "Transportation by air." We proposed that a maximum of two live dogs or cats, 6 months of age or more, that are comparable in size, may be transported in the same primary enclosure when shipped by air. The present standard allows only one dog or cat, 6 months or more of age, to a container. We stated in our proposal that the change was proposed to help reduce stress on animals that would prefer traveling with a companion, rather than alone.

We also proposed that a maximum of two live puppies, 8 weeks to 6 months of age, of comparable size, and weighing over 20 lb (9 kg) each may be transported in the same primary enclosure. Present standards allow only one such puppy per primary enclosure. The present standards also allow only two live puppies and kittens, 8 weeks to 6 months of age, but not weighing over

20 lb (9 kg) each, to be shipped in the same primary enclosure. We proposed that it be permissible to transport a maximum of three such puppies or kittens in the same primary enclosure. In proposed § 3.14(f)(4), we proposed to retain the provision in current § 3.12(d) that weaned puppies or kittens less than 8 weeks old and of comparable size, or puppies or kittens that are less than 8 weeks old and are littermates accompanied by their dam, may be shipped in the same primary enclosure to research facilities. This last provision is limited by the Act to transport to research facilities.

A small number of commenters supported the provisions of proposed § 3.14(f) as written. A number of commenters opposed the provisions in proposed § 3.14(f) that would increase the allowable number of dogs or cats shipped by air in one enclosure. One commenter recommended that an even greater number of puppies and kittens than proposed be permitted transport by air in the same primary enclosure. The commenters who opposed the increase as proposed stated that allowing such an increase would create the potential of increased stress to the animals, and of injuries from fighting. The changes we proposed regarding the number of animals permitted shipment by air in one enclosure were designed to reduce the stress of transportation on the animals. Upon review of the comments, however, it is evident that increasing the number of animals per enclosure could create more stress than it eliminates. We are therefore revising our proposal regarding shipment by air to allow no more than one live dog or cat, 4 months of age or older, to be shipped in a primary enclosure. The revised provisions would also allow only one live puppy, 8 weeks to 4 months of age, and weighing over 20 lbs. (9 kg) to be shipped in a primary enclosure. No more than two live puppies or kittens, 8 weeks to 4 months of age, and weighing 20 lbs. (9 kg) or less, would be allowed transport in the same primary enclosure when shipped by air.

A small number of commenters recommended that only one species of animal be permitted shipment in each primary enclosure. We are making no changes based on this comment. Under the revised provisions, the only dogs and cats that could be shipped together by air would be kittens and small puppies. If these animals are compatible, as required by the proposed regulations, we do not believe there would be a danger in shipping them together.

A small number of commenters, addressing the issue of air

transportation, recommended that the regulations require that cargo space be illuminated to allow observation of transported animals. One commenter recommended that the regulations require that all primary enclosures be secured to the plane cargo area. We do not believe that such requirements would be feasible, given the construction of air transport vehicles, and we are making no changes to our proposal based on these comments.

Several commenters opposed the provision in proposed § 3.14(f)(4) allowing weaned puppies or kittens less than 8 weeks of age to be shipped by air in the same primary enclosure when shipped to research facilities. Such a provision is authorized by the Act with regard to research facilities. We are therefore making no changes to the proposed provision based on these comments.

Primary Enclosures Used to Transport Dogs and Cats: Transportation by Surface Vehicle—Section 3.14(g)

We proposed to add a new § 3.14(g) regarding transportation by surface vehicle. As proposed, these provisions would reinstate primary enclosure requirements that were inadvertently omitted when the standards for the commercial transportation of dogs and cats were revised in 1978. We proposed that a maximum of four dogs or cats may be transported in the same primary enclosure when shipped by surface vehicle, provided all other transportation requirements in proposed § 3.14 are complied with. As explained in our proposal, we proposed to allow shipment of more dogs and cats in surface vehicle enclosures than in air shipping enclosures for several reasons. First, standard enclosures for surface transportation are larger than those customarily used for air transportation. Additionally, when animals are transported by surface vehicle, there is more opportunity for the driver or another person to check on the animals to ensure that their health is being maintained and that the animals are compatible.

Under our proposal, weaned live puppies or kittens less than 8 weeks of age, or puppies or kittens that are less than 8 weeks of age, are littermates, and are accompanied by their dam, would be permitted to be transported in the same primary enclosure when shipped to a research facility, including Federal research facilities.

One commenter supported the provisions as proposed. A number of commenters opposed the provisions. Several commenters stated that

allowing more than two puppies or kittens in the same primary enclosure would be dangerous to the animals. Another recommended that four puppies or kittens be permitted shipment together only over short distances. A number of commenters stated that the regulations for surface transport should be the same as those for air transport. Upon review of the comments, we continue to believe that the fundamental differences between surface transportation and air transportation allow for conditions where a greater number of dogs or cats can be safely transported in the same enclosure by surface vehicle. We are therefore making no changes to our proposal regarding these provisions.

Several commenters opposed the provisions in proposed § 3.14(g)(2) allowing weaned puppies or kittens less than 6 weeks of age to be shipped by surface vehicle in the same primary enclosure. As with air transportation, such a provision is authorized by the Act with regard to research facilities. We are therefore making no changes to the proposed provisions based on these comments.

Primary Enclosures Used to Transport Dogs and Cats: Accompanying Documents and Records—Section 3.14(h)

We proposed to require in proposed § 3.14(h) that shipping documents accompanying the shipments either be maintained by the operator of the conveyance or be securely attached in a readily accessible manner to the outside of the primary enclosures in a way that allows them to be detached for examination and securely reattached. We also proposed to require that instructions for food and water and for administration of drugs, medication, and other special care be attached to each primary enclosure in a manner that makes them easy to notice, to detach for examination, and to reattach securely. One commenter specifically supported the proposed provisions as written. Several commenters stated that the documents accompanying shipment of puppies and kittens under 6 months of age should contain the date of birth of those animals. We do not believe that such a requirement would be practical, especially with regard to the shipment of random source animals, and are making no changes to the proposal based on these comments. One commenter stated that the increasing use of electronic waybills would make it impossible to attach air waybills to the enclosures. The regulations as proposed do not require the attachment of air waybills to the enclosures, only the attachment of

instructions for food, water, the administration of drugs or medication, and other special care.

Primary Conveyances—Section 3.15

To protect the health of dogs and cats during transportation in commerce, the regulations in current §§ 3.16 and 3.17 prohibit animals in transporting devices or holding areas of terminal facilities from being subjected to temperatures above or below a specified range. Temperature is also of concern when animals are being transported in the cargo spaces of primary conveyances. Until 1978, requirements concerning allowable temperatures in primary conveyances were included in § 3.13 of the regulations. However, these requirements were inadvertently omitted from the regulations during the last major revision in 1978.

As we stated in our proposal, the intervening years have demonstrated the need to reinstate these requirements for two principal reasons: (1) The current requirements concerning temperatures in primary conveyances are inconsistent, because dogs and cats in transporting devices and in holding areas of terminal facilities must not be exposed to temperatures outside a specified range, but dogs and cats in animal cargo spaces of primary conveyances—mainly cars and trucks—are not afforded the same protection; and (2) as air freight rates have risen dramatically during this time, increasing numbers of animals are being shipped by surface transportation—some for very long distances—with no provisions that the animals are not subjected to extremes of temperatures.

Under the requirements for air transportation in proposed § 3.15(d), we specified that during transportation, including time spent on the ground, live dogs and cats must be transported in cargo areas that are heated or cooled as needed to maintain the required ambient temperature. Under our proposal, the cargo areas would also have to be pressurized while the conveyance is in the air. In proposed § 3.15(e), we proposed to require that during surface transportation, auxiliary ventilation, such as fans, blowers or air conditioning, be used in animal cargo spaces containing live dogs and cats when the ambient temperature within the animal cargo space is 85 °F (29.5 °C) or higher. Additionally, as proposed, the ambient temperature would not be permitted to exceed 95 °F (35 °C) at any time; nor to exceed 85 °F (29.5 °C) for a period of more than 4 hours; nor to fall below 45 °F (7.2 °C) for a period of more than 4 hours; nor to fall below 35 °F (1.7 °C) at any time. We proposed to add

requirements in proposed § 3.15(c) that a primary enclosure be positioned in a primary conveyance in a way that provides protection from the elements. Current § 3.13(f) requires that dogs and cats not be transported with any material, substance or device that may reasonably be expected to harm the animals. In proposed § 3.15(h), we proposed to clarify the intent of that requirement to indicate that the material, substance or device may not accompany the animals only if the shipment is conducted "in a such a manner" that may reasonably be expected to harm the dogs and cats.

A number of commenters supported the provisions in proposed § 3.15 as written. A number of commenters recommended that an exemption from pressurization of cargo areas be included for aircraft flying 10,000 feet or less. We believe that the commenters' point is a good one, warranting modification of our proposal. In § 3.15(d) of this revised proposal, we are including a provision consistent with standards set forth by the United States Fish and Wildlife Service, and are proposing to require that cargo areas be pressurized, unless the aircraft is flying under 8,000 feet. Several commenters recommended that the proposed provisions regarding pressurization be accompanied by a requirement that air cargo spaces provide sufficient air for normal breathing of the animals. We believe addition of such a provision would help clarify the intent of the regulations and are revising our proposal accordingly.

A small number of commenters addressed the provisions in proposed § 3.15(d) regarding the heating and cooling of air cargo areas. Several commenters stated that the provisions there should be the same as the more specific requirements in proposed § 3.15(e) for temperature levels in surface vehicles. We are making no changes to our proposal based on these comments. The differences between the construction of air and surface vehicles, and the nature of the transportation itself, would make such parallel regulations impractical. Because transportation by air generally requires less time than transport by surface vehicle, we believe that the proposed provisions regarding heating and cooling of air cargo areas would be adequate to ensure the health and well-being of the animals transported.

A small number of commenters stated that the proposed heating and cooling requirements for air cargo areas were too stringent. These commenters stated that carriers do not have the capability

to heat and cool the ground conveyances used to transport animals to and from the terminals and the aircraft. The commenters stated further that compliance with proposed provisions would be impossible because carriers do not have the capability to heat or cool the cargo compartment while the aircraft is on the ground. We disagree that the provisions of proposed provisions would be impossible because carriers do not have the capability to heat or cool the cargo compartment while the aircraft is on the ground. We disagree that the provisions of proposed § 3.15(d) would be unworkable. Those provisions do not address ground conveyances used to transport animals between terminals and aircraft. Further, we disagree that aircraft do not have the capability to control temperature levels while on the ground. We believe that the proposed provisions are workable and necessary. However, we are making one change in § 3.15(d) to clarify our intent. Instead of stating that the air cargo areas must ensure the health and comfort of the animals, the wording in this revised proposal states that the areas must ensure the health and well-being of the animals.

Several commenters stated that the temperature limits in proposed § 3.15(e) regarding surface transportation were too lenient, and should include separate requirements for sick, or very old or very young animals. While we encourage humane treatment of animals with special needs, we do not believe that it would be practical to impose diverse temperature requirements on the same surface vehicles based on the variety of animals it was carrying. We are therefore making no changes to our proposal based on these comments.

In this revised proposal we are removing certain wording that appeared in § 3.15(h) of our proposal, regarding which materials may be transported with dogs and cats. We believe that the original wording was redundant and confusing and that removing it will help clarify the proposed regulations.

Food and Water Requirements—Section 3.16

We set forth requirements regarding food and water for dogs and cats being transported, currently contained in § 3.14, in proposed § 3.16. We also proposed to remove the provision concerning the minimum amount of water that must be offered to dogs or cats under 16 weeks of age. The current regulations require that these dogs and cats be offered at least 60 cc (approximately 2 oz.) of potable water within a prescribed time. As we stated in the supplementary information of our

proposal, the minimum amount in the current regulations is so small that we believe the young dogs and cats would be better served by simply falling under the general requirements concerning the offering of potable water.

Current § 3.14(a) requires that dogs and cats be offered water within 12 hours after the start of transportation or acceptance for transportation. Current § 3.14(b) requires that puppies and kittens be provided food at least once every 12 hours, and dogs and cats over 16 weeks of age be provided food at least once every 24 hours. The current regulations specify that these time periods begin at the time the animals are accepted for transport or the time transport begins, depending on who is carrying out the transport. This method of calculating when the time begins, however, could result in some dogs and cats not being provided water and food for unacceptably lengthy periods of time—in those cases where the animals were provided food and water the maximum time allowed before transport or acceptance for transport, and then not again until the maximum time allowed after transport or acceptance for transport. Therefore, we proposed in § 3.16 (a) and (b) that the time periods for providing food and water to the animals after transport or acceptance for transport begin at the time the dogs and cat was last provided food and water before initiation of transport or acceptance for transport.

In order to minimize the instances where carriers and intermediate handlers have to provide food and water to the animals immediately after accepting them for transport, we proposed that consignors subject to the regulations be required to certify that each dog and cat was provided water within 4 hours before delivery for transportation and that each dog and cat was provided food within 12 hours before delivery for transportation. As proposed, the regulations would require that the certification include the date and times the food and water was offered.

A number of commenters addressed the feeding and water provisions in proposed § 3.16. Approximately half of the commenters addressing the proposed provisions supported them as written. The remainder of the commenters were divided as to whether the proposed provisions were too restrictive or too lenient. A number of commenters stated that it was not necessary for a dog or cat to be provided water during the 4 hours preceding the beginning of transportation in commerce, and that

watering within the 6 hours preceding transport would be sufficient. We believe that changing 4 hours to 6 hours would unnecessarily increase the number of times carriers or intermediate handlers would have to provide water to the animals, and are making no changes to the proposal based on these comments. A small number of commenters recommended that dogs and cats in transport, especially young animals, be fed and watered more often than as proposed. Based on our experience enforcing the regulations, we do not believe such a requirement is necessary or would be practical and are making no changes to our proposal based on this comment. A small number of commenters recommended that, instead of requiring certification of the last feeding and watering, and requiring that the animal be fed and watered within a specified time after acceptance for transport, it be encouraged that the consignor offer food and water to the animal immediately before shipment. We believe that such a change in our proposal would remove a necessary mechanism for ensuring that dogs and cats do not go excessively long periods of time without food and water. Also, it is not wise to give food or water to an animal immediately before transportation, as it may become sick and soil its cage, or aspirate food or water into its lungs. We are therefore making no changes to the proposed regulations based on these comments.

We proposed to set forth the provisions in current § 3.14(d), concerning a carrier or intermediate handler's responsibility regarding written feeding and watering instructions, in proposed § 3.16(c). We proposed to add the provision that food and water receptacles must be securely attached inside the primary enclosure and be placed so that the receptacles can be filled from outside the enclosure without opening the door. We proposed this provision based on information from carriers and intermediate handlers, which indicated to us that when a primary enclosure is opened to provide food or water to the animal inside, there is often a significant risk of the animal escaping from the enclosure. Several commenters stated that the regulations should require that such receptacles be permanently attached to the primary enclosure. We do not believe that such a change would be necessary or would add anything to the regulations, and are making no changes based on these comments. Several commenters stated that one receptacle would be sufficient for both food and water. We do not believe that using the same receptacle

for food and water would be reasonable and are making no changes based on these comments.

Care in Transit—Section 317

We proposed to set forth in proposed § 3.17 the provisions regarding care in transit in current § 3.15. We proposed some minor reformatting for readability, and several additions to the current provisions. The current regulations require that the driver of a surface vehicle check on the dogs and cats he or she is transporting. In proposed § 3.17(a), we proposed to allow this observation to be conducted either by the operator of the conveyance or a person accompanying the operator, but proposed to make it the responsibility of the regulated person transporting the dogs and cats to ensure that this observation is carried out. Additionally, in proposed § 3.17(a), we proposed to use language that specifies that dogs and cats in obvious physical distress be given veterinary care at the closest available veterinary facility. We proposed to make this change to clarify our intent as to the meaning of "as soon as possible" in the current regulations.

In proposed § 3.17(c), we proposed to add an exception to the current regulations that prohibit transport in commerce of a dog or cat in physical distress, to allow transport for the purposes of obtaining veterinary care for the condition.

We proposed to add a subsection § 3.17(e), to specify that these transportation standards remain in effect and must be complied with until the animal reaches its final destination, or until the consignee accepts delivery of the animal. We stated in the supplementary information in our proposal that we believe this provision is necessary to prevent any gap in care for the dog or cat and in responsibility for its care. While we continue to believe that it is important to ensure that no gaps occur in the care of the animal during its transportation, we believe that this intent could be clarified by making a change in the wording of our original proposal. To eliminate any confusion as to what constitutes "final destination," we are changing our proposal to provide that the transportation regulations must be complied with until a consignee takes physical delivery of the animal if the animal is consigned for transportation, or until the animal is returned to the consignor.

A number of commenters supported the provisions of proposed § 3.17 as written. Many commenters opposed the provision that would make air carriers responsible for determining whether an

animal is in distress. The commenters stated that carriers are not trained to determine if animals are in physical distress or are ill. We are making no changes based on these comments. The proposed provisions would not require that carriers determine if an animal was ill, only that they monitor the animals for signs of distress. We believe such an evaluation can be done by a layman.

Proposed § 3.17(d) included provisions, similar to those in the current regulations, that during transportation in commerce a dog or cat must not be removed from its primary enclosure, unless it is placed in a primary enclosure or facility that meets the standards in the regulations. In this revised proposal, we are including an exception to this requirement, for those cases where the animals are removed to allow for required cleaning of the primary enclosure, in accordance with proposed § 3.14(b) of this revised proposal. However, such removal would have to be completed in a way that safeguards the dog or cat from injury and that prevents escape.

Terminal Facilities—Section 3.18

Current § 3.16 imposes duties on carriers and intermediate handlers holding dogs or cats in animal holding areas of terminals to keep the animals away from inanimate cargo, to clean and sanitize the area, to have an effective pest control program, to provide ventilation, and to maintain the ambient temperature within certain prescribed limits. There is currently no similar obligation imposed on other persons who transport these animals. As a result, under the current regulations, animals could be held in animal holding areas under hazardous conditions.

We proposed to move the provisions regarding terminal facilities to proposed § 3.18, and to require that the same duties be imposed on any person subject to the regulations who transports dogs or cats and who holds them in the animal holding areas. As explained in the supplementary information of our proposal, because the animals require this minimum level of care no matter which regulated persons are moving them, it is illogical to place these duties only on carriers and intermediate handlers. Also, we proposed that the length of time that dogs and cats can be maintained in terminal facilities upon arrival after transportation would be the same as that proposed in § 3.13(g).

As well as retaining the temperature requirements in the current regulations, we proposed to add in § 3.18(d) the provision that the ambient temperature in the animal holding area of terminal facilities may not fall below 35 °F (1.7

°C) at any time live dogs or cats are present. The regulations we proposed would specify a procedure for measuring the ambient temperature. Under the proposal, in cases where a terminal facility contains more than one primary enclosure, it is possible that several temperature readings would have to be made to determine the ambient temperature at each primary enclosure. Also, § 3.18(e) as proposed contains those provisions contained in current § 3.17 that require shelter from the elements for dogs and cats, because the current provisions apply to persons holding a dog or cat in an animal holding area of a terminal facility.

A number of commenters supported the provisions of proposed § 3.18 as written. Many other commenters stated either that the proposed temperature requirements were too restrictive or too lenient. One commenter expressed concern that the proposed temperature requirements would prevent many airports from accepting shipments of dogs and cats. We are making no changes based on these comments. Except for the addition of the 35 °F (1.7 °C) minimum, the provisions proposed are provisions that have been in effect since 1978. These provisions have presented no significant practical problems or health risks to animals since that time. A number of commenters stated that it was inconsistent to allow animals to commingle with inanimate cargo in the cargo areas of a conveyance, but not in terminal facilities. While we agree that it would be desirable to impose such a restriction with regard to primary conveyances, standard transportation practices would make such a restriction impractical and unworkable. However, it is possible to separate animals from inanimate cargo in terminal facilities, and we continue to believe it is appropriate for the well-being of the animals to retain such a restriction.

Several commenters stated that fresh air should be mandatory in the animal holding areas of terminal facilities. We disagree. The evidence presented to us in comments addressing other areas of the proposed regulations indicates that, in many cases, recycled air is preferable to the fresh air that might be available at a particular facility. We are therefore removing the requirement in proposed § 3.18(c) requiring "air, preferably fresh air," and replacing it with a requirement for "ventilation."

One commenter recommended that we expand on the requirement in proposed § 3.18(f) regarding the length of time that dogs and cats may be held in animal holding areas of terminal

facilities to establish a penalty mechanism for violation of the regulations. We believe that the standards for compliance are adequate as written, and do not believe it is necessary to specify enforcement procedures in provisions regarding animal welfare standards.

Handling—Section 3.19

Current § 3.17 also imposes duties on carriers and intermediate handlers for proper handling and movement of dogs and cats. For reasons explained above under "Terminal facilities," we included provisions in proposed § 3.19 to impose the same duties on any person subject to the regulations when handling a dog or cat at any time during the course of transportation in commerce, so that the animals' health, safety and well-being will be protected at all times during transport. As explained in the proposal, this would include movement from an animal holding area of a terminal facility to a primary conveyance and from a primary conveyance to a terminal facility. This would also include movement of the dog or cat on a transporting device used to transfer the animal from a primary conveyance to an animal holding area and vice versa, movement from one primary conveyance to another, and movement from place to place within the terminal facility.

A small number of commenters stated that the temperature requirements in proposed § 3.19 were too restrictive. Several commenters stated that the regulations should not allow exceptions to specific minimum temperature requirements based on certificates of acclimation to lower temperatures, as included in the proposal. We are making no changes to the proposal based on these comments. The provisions proposed are those that have worked satisfactorily under the current regulations, and we see no need to amend them at this time.

We proposed to require in proposed § 3.19(b) that care be exercised to avoid handling primary enclosures in such a way that dogs or cats in the primary enclosures are caused physical or emotional distress. Because of problems and complaints concerning the handling of dog and cat shipments in baggage areas by airlines, we proposed that primary enclosures containing dogs or cats must not be placed on unattended conveyor belts or on elevated conveyor ramps such as baggage claim conveyor belts and inclined conveyor ramps leading to baggage claim areas. We proposed to allow primary enclosures to be placed on inclined conveyor ramps that are used to load and unload

aircraft, if there is an attendant at each end of the conveyor belt.

A number of commenters supported the provisions of proposed § 3.19(b) as written. A small number of commenters recommended that the regulations allow primary enclosures on baggage claim conveyor belts if the belts are specially designed for such use. We believe that interpretations of what constitutes "specially designed" would cause enforcement problems, and are making no changes to the proposal based on these comments.

Miscellaneous

Some commenters recommended that we make various nonsubstantive wording changes to the proposal for purposes of clarity. We have made such changes where we considered them appropriate. Additionally, a number of commenters made recommendations that addressed issues outside the scope of our proposal, including recommended husbandry and animal handling practices. While we are making no changes to our proposal based on these comments, we have carefully reviewed them and will take whatever action is appropriate.

Subpart D—Nonhuman Primates

Regulations on the humane handling, care, treatment, and transportation of nonhuman primates are contained in 9 CFR part 3, subpart D. These regulations include minimum standards for handling, housing, social grouping and separation of species, feeding, watering, sanitation, ventilation, shelter from extremes of weather and temperature, veterinary care, and transportation.

In our March 15, 1989, proposal, we proposed to revise and rewrite the current regulations based on our experience administering them under the Act. We also proposed to amend our regulations to add requirements for a physical environment adequate to promote the psychological well-being of nonhuman primates. This is specifically required by the 1985 amendments to section 13 of the Act. (See section 1752, 99 Stat. 1645, Pub. L. 99-198, amending 7 U.S.C. 2143.) We discuss each topic covered in our proposed regulations below.

As discussed in the supplementary information of our proposal, in preparing to revise and amend subpart D, we engaged in extensive study of the environmental needs of nonhuman primates that must be met to promote their psychological well-being. We actively sought input from various professional communities that are subject to the regulations. We formed a committee to study the psychological

needs of nonhuman primates maintained by the research community and to make specific recommendations to us concerning the various issues presented by the 1985 amendments to the Act. This committee was comprised of APHIS representatives and ten members of the scientific research community. The members were experts recommended by the National Institutes of Health and were appointed by APHIS to formulate recommendations for means of providing an environment to promote the psychological well-being of nonhuman primates. Observers from NIH were also present during committee deliberations, although they were not members of the committee.

We also sought and obtained input from organizations, such as the National Association for Biomedical Research, which represent facilities utilizing nonhuman primates in their research.

We invited animal exhibitors to participate in the development of regulations to promote the psychological well-being of nonhuman primates. The American Association of Zoological Parks and Aquariums, a nonprofit, tax-exempt organization dedicated to the advancement of zoological parks and aquariums for conservation, education, scientific studies and recreation, formed a Primate Study Committee to develop materials concerning space requirements and the various environmental enrichments required by different species of nonhuman primates, based upon their social behavior and species-typical activity, in order to promote their psychological well-being.

The results of these efforts are explained in greater detail below in our discussion of the minimum space and environmental requirements set forth in our proposal.

The regulations we proposed in our revision of subpart D are minimum standards to be applied to all species of nonhuman primates. In our proposal we retained current footnote 1 of subpart D, although we revised it to reflect the need to promote the psychological well-being of nonhuman primates. Rather than stating that "discretion" must be used due to the variation in species, we proposed to require that these minimum standards be applied in a manner that is considered appropriate for the relevant species in accordance with customary and generally accepted professional and husbandry practices.

The Act applies to all nonhuman primates, whether living or dead. The standards we proposed are principally applicable to live nonhuman primates. In footnote 1 of our proposal, we

indicated that the proposed regulations apply only to live nonhuman primates, unless stated otherwise.

A large number of commenters addressed issues relevant to subpart D as a whole. Not surprisingly, considering the controversial nature of the subject, a great number of commenters focused their attention on the psychological well-being of nonhuman primates. A recurring theme among many commenters was that psychological well-being is undefinable and cannot be measured as an improvement for nonhuman primates. Many commenters stated that the proposed standards for psychological well-being were without basis in scientific data. During our consultations with experts on primate behavior, we became aware of the divergent opinions on how to interpret existing research. We disagree, however, that the standards we proposed were without basis. As discussed above, we consulted extensively with experts in the field of primatology. We supplemented the recommendations provided by those experts with information gained from our own experience in enforcing the regulations. Using the information available to us, we proposed standards that we believed would meet the intent of Congress in requiring us to add standards for a physical environment adequate to promote the psychological well-being of nonhuman primates. We could not, as some commenters recommended, accept the status quo. Such inaction would not fulfill our Congressional mandate, and would not, we believe, be in the best interest of the animals we are charged with protecting. Even if, as some commenters suggested, the amorphous nature of "psychological well-being" was not fully anticipated when the Act was amended, that would not relieve us of our responsibility to establish standards that best approach achieving that goal. We do not agree, as some commenters asserted, that significant evidence exists to indicate that the proposed changes in the regulations might be detrimental to nonhuman primates.

A number of commenters questioned the extent to which we incorporated the recommendations of the "expert committee" that was convened prior to development of the regulations. Many commenters stated that we should publish the proceedings and recommendations of that committee. The recommendations of the committee are included in the administrative record of this proposed rulemaking, and consequently are open to public inspection. We therefore see no need to

publish them in the Federal Register. In developing the proposed regulations, we drew from information supplied by experts in the field of primatology, including the expert committee, to develop standards that we considered adequate to meet our responsibility under the Animal Welfare Act. As we discussed above, we discovered in developing the standards that there was a divergence of opinion concerning which standards would most appropriately promote the well-being of the animals. In publishing the proposal, we invited and encouraged the submission of data and research findings from experts in the field and from other members of the public. We have carefully analyzed the information and recommendations we received, and have continued our ongoing analysis of all research data available to us. Based on this analysis, we have made, in this revised proposal, what we consider significant changes to our original proposal regarding standards for promoting the psychological well-being of nonhuman primates. We once again invite and encourage public response to these proposed provisions.

Several commenters recommended that a national level "primate well-being committee" be created to evaluate and provide guidelines for the care of nonhuman primates. We do not believe it is necessary or appropriate to delay publication of proposed standards pending formation of such a committee.

Several commenters suggested we replace the term "generally accepted professional and husbandry practices" in the proposal with appropriate definable standards. We disagree that such a change is necessary and are making no change to our proposal based on these comments. For like reason, we are not replacing the term "nonhuman primate(s)" with "primate(s)," as suggested by some commenters.

A small number of commenters recommended that the recordkeeping requirements in both subparts A and D be removed. In this proposal we have removed certain of the proposed requirements for recordkeeping, based on our analysis of comments specifically addressing those requirements. We believe the recordkeeping requirements we have retained are necessary for enforcement of the regulations.

Housing Facilities and Operating Standards

Current §§ 3.75 through 3.77 provide requirements for facilities used to house nonhuman primates. Current § 3.75, "Facilities, general," contains regulations pertaining to housing facilities of any kind. It is followed by

current § 3.76, "Facilities, indoor," and § 3.77, "Facilities, outdoor." We proposed to amend these sections to provide for an environment that better promotes the psychological well-being of nonhuman primates. We also proposed to add sections that provide regulations specifically governing two other types of housing facilities used to house nonhuman primates, sheltered housing facilities and mobile or traveling housing facilities. The term "sheltered housing facility" is defined in part 1 as "a housing facility which provides the animals with shelter; protection from the elements; and protection from temperature extremes at all times. A sheltered housing facility may consist of runs or pens totally enclosed in a barn or building, or of connecting inside/outside runs or pens with the inside pens in a totally enclosed building." The term "mobile or traveling housing facility", also defined in part 1, means "a transporting vehicle such as a truck, trailer, or railway car, used to house animals while traveling for exhibition or public education purposes."

Some of the requirements we proposed for housing facilities are applicable to housing facilities of any kind. As in the current regulations, we proposed to include these standards of general applicability in one section, proposed § 3.75, in which we also included many of the provisions of current § 3.75. Additionally, we proposed amendments to the current regulations that are specific to particular types of housing facilities, and included those provisions in separate sections of the proposed regulations. In some cases, where the current regulations would have been unchanged in substance, we made wording changes to clarify the intent of the regulations.

Housing Facilities, General

Housing Facilities: Structure; construction—Section 3.75(a)

Because nonhuman primates vary widely in size, weight, and range of activity, the design, composition and structural strength required of housing facilities varies as well. We proposed to require in proposed § 3.75(a) that the design, composition, and structural strength of a housing facility be appropriate for the particular species housed in it. For example, the actual structural requirements for a housing facility would differ depending upon whether it is used to house marmosets, a small nonhuman primate species, or great apes, a typically large species weighing more than 88 lbs. (40 kg.). No

comments addressed these provisions, and we are making no changes in this revised proposal.

We also proposed in § 3.75(a) that the housing facility be constructed so as to restrict other animals and unauthorized humans from entering. A number of commenters addressed the issue of restricting the entrance of unauthorized humans. While some supported this provision, most stated that responsibility for maintaining adequate security at a facility belongs to the facility, and not to the Department of Agriculture. While we agree that exclusion of unauthorized humans is to some degree a general security issue, we continue to believe that such individuals could pose the risk of injury to the animals housed. Because the well-being of the animals would be at stake, we are statutorily authorized to restrict such entrance. We are therefore making no changes to our proposal based on the comments.

Housing Facilities: Condition and Site—Section 3.75(b)

In proposed § 3.75(b), we proposed to add the requirement that a dealer's or exhibitor's housing facilities be physically separated from any other business. When a housing facility is located on the same premises as any other business, there is likely to be increased traffic and activity, which is known to be distressful to nonhuman primates. Also, when more than one dealer maintains facilities on the premises, it can be difficult to determine which dealer is responsible for which animals and for the conditions of the facility. This has made inspection and enforcement of the regulations difficult. To avoid these difficulties we proposed to require that housing facilities, other than those maintained by research facilities and Federal research facilities, be physically separated from other businesses. As we explained in the supplementary information of our proposal, this can be done by using a security fence or by conducting each business in a separate building. As proposed, the means of separation used would have to be constructed so that it prevents unauthorized humans, and animals the size of dogs, skunks, and raccoons, from going through it or under it. We did not propose to impose these requirements upon research facilities because they are often part of a larger sponsoring establishment, such as a university or pharmaceutical company, and responsibility for animal and site conditions rests with that establishment. Therefore, we have not encountered the enforcement difficulties noted above with respect to research facilities.

We also proposed in § 3.75(b) that housing facilities and areas used for storing animal food and bedding be kept free of any accumulation of trash, weeds, and discarded material, in order to prevent unsanitary conditions, diseases, pests, and odors. The need for orderliness applies particularly to animal areas inside of housing facilities, and we proposed that they must be kept free of clutter, including equipment, furniture, or stored material, and materials not necessary for proper husbandry practices.

A number of commenters addressed these provisions. Some supported the provisions as written. Others were concerned that our prohibition of "clutter" would prohibit equipment and material actually used in the day-to-day operation of the facility. It was not our intent to prohibit materials that are used on a regular basis from being kept in animal areas, and we have made revisions to our proposal to address that issue. In this revised proposal, we are not including the examples we provided in our proposal of acceptable materials and equipment, in order to avoid giving the impression that the items listed are the only ones that may be kept in animal areas. We are also providing that necessary "equipment" may be kept in animal areas, and that materials, equipment, and fixtures necessary for research needs may be kept in such areas. Additionally, in order to clarify our intent with regard to the storage of cleaning materials that are necessary for proper husbandry, we are adding a provision to proposed § 3.75(e) to specify that toxic materials stored in animal areas must be stored in cabinets, but may not in any case be stored in food preparation areas.

Housing Facilities: Surfaces; General Requirements—Section 3.75(c) (1) and (2)

In proposed § 3.75(c), we proposed to include requirements concerning housing facility surfaces that are common to all types of facilities. The current regulations require that interior surfaces of indoor housing facilities be constructed and maintained so that they are substantially impervious to moisture and may be readily sanitized. They do not specify frequency to sanitization. They also do not provide any requirements for building surfaces used in outdoor housing facilities.

We proposed to remove the requirement that housing facilities have impervious surfaces, because many can simulate more natural environments by providing dirt floors and planted areas that are beneficial to the nonhuman primates' psychological well-being. In

proposed § 3.75(c)(1), we provided that outdoor floors could be made of dirt, sand, gravel, grass, or other similar material that can be readily cleaned and is removable.

Under our proposal, any surfaces that come in contact with nonhuman primates would have to be maintained regularly so that they are kept in good condition. As proposed, interior surfaces and furniture-type fixtures or objects within the facility, such as perches, swings, and dens, would have to be made so that they can be readily cleaned and sanitized, or removed or replaced when worn or soiled. We proposed to add this requirement because we would no longer require impervious surfaces under our proposal, in an effort to encourage provision of more natural environments for the animals. Because porous surfaces may not be adequately sanitized, we proposed to require instead that they be removed or replaced when worn or soiled. This requirement appeared in our proposal in proposed § 3.75(c)(2). Otherwise, as proposed, the manner of construction and the materials used would have to allow for cleaning and sanitization.

In proposed § 3.75(c)(1), we proposed to require that surfaces that come in contact with nonhuman primates be free of jagged edges or sharp points that could injure the animals, as well as rust that prevents the required cleaning and sanitization or affects the structural integrity of the surfaces. Because we recognize that as long as water is used to clean animal areas metal parts will rust, we proposed to allow some rust on metal areas, as long as it does not reduce structural strength or interfere with proper cleaning and sanitization because that could present hazards to the animals.

A number of commenters addressed the above issues. Most supported the provisions as written. One suggested that our standards for replacement of surfaces were too stringent. Another recommended that we allow indoor, as well as outdoor floors to be made of a replaceable material. We disagree that our standards are excessively stringent. We do agree, however, that with proper maintenance, replaceable surfaces could be used indoors for nonhuman primates without harming the health or well-being of the animals housed. Therefore, we are proposing to remove the wording restricting replaceable floor surfaces such as dirt, sand, gravel, or grass to outdoor floors. One commenter stated that our standards seemed to prohibit the presence of rust. It was our intent to provide that rust would become

unacceptable only when it prevented cleaning and sanitization or affected the structural strength of a surface. To further clarify this intent, we are proposing to prohibit "excessive" rust that causes such problems.

Housing Facilities: Surfaces; Cleaning—Section 3.75(c)(3)

In proposed § 3.75(c)(3), we proposed to require that hard surfaces that come in contact with nonhuman primates be cleaned daily and sanitized at least once every two weeks and as often as necessary to prevent any accumulation of excreta or disease hazards, in accordance with generally accepted husbandry practices, unless the nonhuman primates engage in scent marking. As we discussed in the supplementary information of our preamble, scent marking is an inborn method used by certain species of nonhuman primates in nature (such as species of prosimians, marmosets, tamarins, and callimico) to establish their territory and for identification by other members of the species. Animals can detect that another member of the species has occupied a site by the scent left behind and can locate companions in this manner. It is distressful for these nonhuman primates to have the scent marks eliminated, since they lose their territorial claim and their frame of reference. We therefore proposed that hard surfaces that come in contact with nonhuman primates that scent mark be spot cleaned daily and that they be sanitized at regular intervals that would be determined in accordance with generally accepted professional and husbandry practices.

In proposed § 3.84(b)(3), we provided various methods of sanitizing primary enclosures. Because these methods are effective in general for sanitization of hard surfaces that nonhuman primates come in contact with, except for dirt floors and planted areas, under our proposal any of them could be used for the sanitization required by proposed § 3.75(c)(3). The method of sanitization would be determined by the housing facility operator. As proposed, planted enclosures and floors made of dirt, sand, gravel, grass, or other similar material would have to be raked and spot cleaned daily, since sanitization is not practicable. We proposed that contaminated flooring material would have to be removed if raking and spot cleaning does not eliminate odors, diseases, insects, pests, or vermin infestation. The material could then be replaced or a different material could be used. As proposed, all other surfaces of housing facilities would have to be cleaned daily and sanitized as

necessary to satisfy general accepted husbandry practices.

A number of commenters supported the provisions proposed in § 3.75(c)(3), specifically with regard to scent-marking nonhuman primates. A number of commenters suggested modifications to our provisions. Some opposed even spot-cleaning with regard to scent-marking species; others suggested that we allow hard surfaces contacted by scent-marking species to be replaced rather than sanitized. Some stated that it was unnecessary to rake outdoor surfaces daily, or that it was unnecessary to remove animal wastes daily. Others suggested that we loosen or remove the timetables for cleaning and sanitization to allow greater flexibility.

While we continue to believe that cleaning and sanitization is necessary for surfaces that become soiled, we believe that certain modifications can be made to the proposed provisions without endangering the health and well-being of the nonhuman primates. We disagree that surfaces in contact with scent-marking species should not even be spot-cleaned. Removal of waste material is necessary for animal health, and spot-cleaning will not interfere with scent marking. We do agree that daily spot-cleaning of hard surfaces with which nonhuman primates come in contact, even if the animals are not a scent-marking species, would be sufficient cleaning for the health and well-being of the animals. We are therefore revising our proposal to require that hard surfaces in contact with nonhuman primates be spot-cleaned daily. Additionally, we are revising our proposal to require that such hard surfaces be sanitized as often as necessary to prevent any accumulation of excreta or disease hazards, in accordance with our sanitization provisions in proposed § 3.84. Under those provisions, such hard surfaces in indoor primary enclosures would have to be sanitized at least once every two weeks. We are also proposing in this revision to allow replacement, rather than sanitization, of hard surfaces in contact with nonhuman primates, and are revising our proposal to provide that floors made of dirt, absorbent bedding, sand, gravel, grass, or other similar material, and planted enclosures, be either raked or spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta, rather than raked and spot cleaned daily, as originally proposed. Additionally, in this revision we are removing our proposed requirement that all other surfaces of

housing facilities be cleaned daily, and are proposing instead that all other surfaces be cleaned when necessary to satisfy generally accepted husbandry practices. We are making this last change in recognition of the fact that some areas in housing facilities, such as upper walls and ceilings, are not in contact with nonhuman primates and do not require daily cleaning. We are including "absorbent bedding" as a material similar to dirt, sand, gravel, and grass because many facilities use such bedding, and consider it preferable to alternative surface materials.

Housing Facilities: Water and Electric Power—Section 3.75(d)

Section 3.75(d) provides requirements for water and electric power. It specifies that reliable and adequate water and electric power must be made available "if required to comply with other provisions of this subpart." In the proposed rule, we set forth the provisions concerning water and electric power in § 3.75(d). We proposed there to eliminate the qualifying statement cited above, and to require reliable electric power that is adequate for heating, cooling, ventilation, lighting, and other husbandry requirements, and mechanically pressurized potable running water for the nonhuman primates' drinking needs and adequate for cleaning and for carrying out other husbandry requirements. As we stated in the supplementary information of our proposal, based upon our inspections of dealer, exhibitor, and research facilities, we believe that nonhuman primate facilities subject to the Animal Welfare regulations cannot be properly cleaned and maintained without electric power and running potable water under pressure.

A number of commenters addressed proposed § 3.75(d). Some supported the provisions as written; others opposed the provisions in their entirety. Most of the comments regarding this paragraph recommended that our reference to "mechanically pressurized potable running water" be changed to "potable running water." We continue to believe that electric power and potable running water are necessary for the cleaning and maintenance of nonhuman primate facilities. However, upon review of the comments, we believe that it is not necessary that the water be "mechanically pressurized." We are therefore revising the proposal to require that potable running water be available. A small number of commenters stated that our proposal erroneously indicated that electric power is necessary for adequate

cleaning. We disagree with the commenters' interpretation of our discussion. The only areas specifically cited in our proposal as requiring electric power are heating, cooking, ventilation, and lighting. A small number of commenters asked that we define "reliable electric power." We believe the standard dictionary definitions of these words are adequate and see no need to define the term in the regulations.

Housing Facilities: Storage—Section 3.75(e)

We proposed in § 3.75(e) to expand the regulations in current § 3.75(c) concerning proper storage of food and bedding supplies. We proposed to retain the requirements that food and bedding be stored so as to protect them from vermin infestation or contamination, and that perishable food be refrigerated. We proposed requirements to ensure further the quality of the physical environment surrounding nonhuman primates. We proposed to add a requirement that food and bedding be stored in leakproof containers to protect the supplies from spoilage, contamination, and vermin infestation, and that open food and bedding supplies be kept in leakproof containers with tightly fitting lids to prevent spoilage and contamination. In proposed § 3.75(e), we proposed to require that substances that would be toxic to nonhuman primates be stored away from animal areas and food storage and preparation areas. Under our proposal, only the food and bedding in use could be kept in animal areas; when they were not in use they would have to be properly stored. In addition, as proposed, all food would have to be stored so as to prevent contamination or deterioration of its nutritive value. The supplies would have to be stored off the floor and away from the walls, to allow cleaning around and underneath them.

Approximately half of the comments received in response to these provisions supported them as written. The remainder suggested some modifications. Some commenters suggested that our requirement that all food and bedding be stored in leakproof containers was unnecessary. Although we continue to believe that the health and well-being of the animals necessitates the storing of open food and bedding supplies in leakproof containers, we agree that until such supplies are open, it is sufficient that they be stored in a manner that protects them from spoilage, contamination, and vermin infestation, and are revising our proposal accordingly. Some commenters were concerned that our proposed

requirement that perishable food be refrigerated would require refrigeration of milled chows and diets. We are clarifying our intent in this revised proposal by specifying that only food requiring refrigeration must be so stored. One commenter recommended that properly labeled and sealed toxic substances should be allowed to be stored in animal areas where they are used. Although we continue to believe that toxic substances cannot be stored in food storage or preparation areas without endangering the animals, we agree that if such substances are kept in cabinets in other animal areas, there would be little danger to the animals. We are therefore revising our proposal to allow such storage.

Housing Facilities: Drainage and Waste Disposal—Section 3.75(f)

The regulations we proposed would continue to require that housing facilities provide for removal and disposal of animal and food wastes, bedding, dead animals, and debris, as provided in current § 3.75(d). We proposed to clarify this requirement so that it clearly applies to all fluid wastes, and to include a requirement that arrangements must be made for prompt daily removal and disposal of wastes. Under the proposal, removal and disposal would have to be carried out more than once each day if necessary to avoid problems with odors, pests, insects, and diseases. The regulations as proposed also contained the requirements that trash containers be leakproof and tightly closed when not in use, and that all forms of animal waste, including dead animals, be kept out of food and animal areas.

Requirements for drainage systems are currently provided in §§ 3.76(e) and 3.77(d) for indoor and outdoor facilities, respectively. Because all types of animal housing facilities, including sheltered housing facilities and mobile or traveling housing facilities, require a proper disposal facility and drainage system, we proposed to consolidate all drainage and waste disposal requirements in proposed § 3.75(f). We proposed to expand the requirements for drainage systems to provide that in all types of housing facilities, whether open or closed drains, waste sump ponds, or settlement ponds are used, they must be properly constructed, installed, and maintained, and they must minimize vermin and pest infestation, insects, odors, and disease hazards. As part of this safeguard, we proposed to require that waste sump ponds and settlement ponds be located an adequate distance from the animal area of the housing facility to prevent problems with

vermin, pests, odors, insects, and disease hazards. As proposed, drainage systems would also have to eliminate animal wastes and water rapidly, so that the animals can stay dry. This is necessary because it is known to be distressful to nonhuman primates to be involuntarily wetted. Traps would be necessary in closed drainage systems to prevent the backflow of gases and the backup of sewage onto the floor.

A small number of commenters specifically supported the provisions in proposed § 3.75(f) as written. Several commenters stated that a lid on a trash can would not necessarily reduce odor or the availability of waste to vermin, as feces and urine are found in cages and are already available to vermin. We are making no changes based on these comments. The intent of the regulations is to minimize disease hazards such as vermin. The cleaning and sanitization requirements of this proposed rule are designed to help ensure that cages are kept adequately clean. In combination with these requirements, we believe it is necessary to require sanitary practices such as lids on trash cans.

A small number of comments stated that our requirements regarding backflow valves and the necessity that animals remain dry were unnecessary. Upon review of the comments, we continue to believe the regulations as proposed are necessary for the health and well-being of the animals housed, and are making no changes to our proposal based on these comments.

A small number of commenters stated that in certain facilities daily removal of wastes and dead animals is not necessary, and that the regulation should permit such removal to be conducted as necessary. We agree such removal, if conducted regularly and frequently, would be adequate to protect the health and well-being of the animals, and are revising our proposal accordingly. We have also added a provision to our revised proposal to make it clear that waste materials must be collected and disposed of in a manner that minimizes contamination and disease risk. Additionally, we are adding a clarification to specify that only puddles of standing water must be mopped up or drained so that the animals stay dry. This change will clarify that water that evaporates quickly or that is otherwise eliminated quickly does not endanger the health and well-being of the animals, and need not be mopped up.

Housing facilities: Washrooms and Sinks—Section 3.75(g)

We proposed to retain the requirement contained in current § 3.75(e) that washing facilities be available to animal caretakers for their cleanliness, and to include it in proposed § 3.75(g). The only comments we received regarding this provision supported it. We are therefore making no changes in our proposal regarding proposed § 3.75(g).

Requirements for Different Types of Housing Facilities

The current regulations specify two kinds of housing facilities, indoor and outdoor. These terms are defined in part 1 of the regulations. An indoor housing facility is defined as "any structure or building with environmental controls housing or intended to house animals" that is fully enclosed and has a continuous connection between the floor, ground, and ceiling, is capable of being temperature and humidity controlled, and has at least one door for entry and exit. An outdoor housing facility is defined as "any structure, building, land, or premise, housing or intended to house animals, and which does not meet the definition of an indoor housing facility or a sheltered housing facility and in which temperatures cannot be controlled within set limits. We proposed to add two additional sections containing requirements for sheltered housing facilities and mobile or traveling housing facilities, previously defined in this document.

Requirements for Enclosed or Partially Enclosed Housing Facilities

Three of the four types of housing facilities that may be used to house nonhuman primates are either enclosed or partially enclosed. They are indoor housing facilities, mobile or traveling housing facilities, and the sheltered portion of sheltered housing facilities. We proposed to require that all of these enclosed types of housing facilities be required to provide heating, cooling, and ventilation, and to maintain temperatures within the temperature limits provided in current paragraphs (a) and (b) of § 3.76 "Facilities, indoor," as discussed below. Additionally, we proposed to establish a minimum temperature for shelters provided in outdoor facilities.

1. Temperature Requirements—Sections 3.76(a), 3.77(a), 3.78(b), and 3.79(a)

We proposed that there must be sufficient heat provided to protect nonhuman primates from cold temperatures. As proposed, the ambient

temperature (defined in Part 1 of the regulations as the temperature surrounding the animal) must not fall below 50 °F (10 °C). We also proposed to require cooling to protect nonhuman primates from high temperatures, specifying that the ambient temperature must not rise above 85 °F (29.5 °C), except that, as proposed, for mobile or traveling housing facilities only, the upper temperature limits would be 95 °F (35 °C) when nonhuman primates are present. However, as proposed, in mobile or traveling housing facilities, auxiliary ventilation such as fans or air conditioning would have to be provided when the temperature is 85 °F (29.5 °C) or higher. Because the various species of nonhuman primates have different optimal ambient temperatures and different tolerances for higher and lower temperatures, we proposed to require that the actual ambient temperature maintained be at a level that ensures the health and well-being of the species housed, in accordance with generally accepted professional and husbandry practices.

We received a large number of comments with regard to the issue of temperature in indoor, sheltered, and mobile and traveling housing facilities, and concerning the minimum temperature for shelters in outdoor facilities. Some commenters supported the provisions as written. Some commenters opposed temperature standards of any sort with regard to housing facilities and elsewhere in the regulations. One commenter recommended a maximum temperature of 85 °F in all housing units. Most of the commenters stated that our range of allowable temperatures was too restrictive, and that we should allow temperatures lower than those proposed, and, in the case of indoor and sheltered facilities, higher than those proposed. A number of commenters stated that our proposed temperature ranges did not encompass natural conditions for many species. A number of commenters also recommended that we allow the attending veterinarian to use professional judgment when determining appropriate temperature levels.

We continue to believe that temperature standards are necessary to ensure the well-being of nonhuman primates. Upon review of the comments, however, we agree that many species of nonhuman primates can tolerate temperatures both lower and higher than those included in our proposal. We also agree that, within the allowable temperature range, the actual temperature level most appropriate for

the animals can best be determined by an attending veterinarian. Therefore, we are revising our proposal to provide that, in indoor facilities, the sheltered parts of sheltered housing facilities, and mobile or traveling housing facilities, the ambient temperature must not fall below 45 °F (7.2 °C) and must not rise above 95 °F (35 °C) when nonhuman primates are present. We are also proposing to require that shelters provided in outdoor facilities provide heat to nonhuman primates to prevent the ambient temperature from falling below 45 °F (7.2 °C), except as directed by the attending veterinarian and in accordance with generally accepted professional and husbandry practices. Additionally, we are revising our proposal to provide that, in indoor housing facilities, the sheltered parts of sheltered housing facilities, and mobile or traveling housing facilities, the actual ambient temperature must be maintained at a level that ensures the health and well-being of the species housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

Many commenters stated that it would not be practical or feasible to attempt to control temperatures in outdoor primate housing facilities, especially if the facility is a large corral type. While we agree that it would be difficult or impossible to control the ambient temperature in the outdoor portion of outdoor housing facilities, the regulations as proposed would require only that the animal shelters in such facilities be maintained at temperatures no lower than 50 °F (10 °C). There are practical methods of heating such shelters, such as heating lamps, and we do not believe that the commenters' concerns warrant a change in our proposal.

One commenter on our proposed rule recommended that for both indoor and outdoor housing facilities, five or six "ecological niches" be defined in terms of temperature and humidity ranges, and that each species be classified into one of these niches. We do not believe that it would be possible to implement such a system on a practical level, given the wide range of species that might inhabit the same facility.

The requirements we proposed for mobile or traveling housing facilities in our original proposal also would require that auxiliary ventilation be provided when the ambient temperature in the facility is 85 °F (29.5 °C) or higher. Because we are now proposing to increase the upper temperature limit in indoor and sheltered housing facilities to 95 °F (35 °C), we believe it is necessary

for the health and well-being of nonhuman primates housed in such facilities to impose a like requirement for auxiliary ventilation whenever the ambient temperature in the facility is 85° F (29.5° C) or higher. We are therefore including such a requirement in this revised proposal.

A large number of commenters recommended that we remove the proposed requirement that heating and cooling must provide for the animals' "comfort." We agree that the use of the word "comfort" is inappropriate for use in the proposed regulations. Although we encourage an environment that will promote the nonhuman primates' comfort, the intent of the regulation is to provide minimum standards for the health and well-being of the animals. For this reason, in this revised proposal we are removing the word "comfort" wherever it appeared in the proposed provisions regarding housing facilities.

2. Ventilation and Relative Humidity Level—Sections 3.76(b), 3.77(b), and 3.79(b)

In our proposal, we proposed that the current requirement in § 3.76(b) for ventilation of indoor housing facilities would be applicable to the three types of enclosed housing facilities, to provide for the health, comfort, and well-being of nonhuman primates. For sheltered housing facilities, we proposed that the requirement would apply only to the sheltered portion of the facility, since the outdoor portion could not be humidity controlled. We proposed to add that ventilation must also be provided to minimize odors, drafts, and ammonia levels in these housing facilities and that mobile or traveling housing facilities must be ventilated to minimize exhaust fumes, to protect the well-being of the nonhuman primates.

We also proposed to require that, except in mobile or traveling housing facilities, the relative humidity in enclosed facilities be maintained between 30 and 70 percent. We proposed that the actual relative humidity maintained would depend upon the species housed and that it would have to be maintained at a level that ensures the health and well-being of the species housed, in accordance with generally accepted professional and husbandry practices. In the supplementary information of our preamble, we noted that certain species of nonhuman primates are known to be less tolerant of a wide range of humidity levels and therefore should be maintained at more specific humidity levels. We also noted that the NIH Guide provides precise humidity levels for certain species, and that individuals

subject to our regulations could refer to the NIH Guide for these animals, because use of the Guide would maintain actual humidity levels within the requirements of these regulations and conform to generally accepted professional and husbandry practices.

We did not propose to require that a precise range of humidity levels be maintained in mobile or traveling housing facilities because they travel into all parts of the United States that have varying levels of humidity. Typically, the species of nonhuman primates that travel in these facilities are chimpanzees used in circuses and trained animal acts. Chimpanzees can tolerate a wider range of relative humidity levels than most species of nonhuman primates and would not be exposed to an undue health hazard if there is no range of humidity levels specified in the regulations. However, we proposed to require that the relative humidity level be maintained at a level that ensures the health and well-being of the species housed, in accordance with generally accepted professional and husbandry practices. Under the regulations we proposed, operators of mobile or traveling housing facilities, as well as all other housing facility operators, would still be subject to the general requirement contained in footnote 1 to the heading of Subpart D, which provides that these regulations must be applied in accordance with customary and generally accepted professional and husbandry practices considered appropriate for each species, and accordingly could not expose nonhuman primates to relative humidity levels that are considered hazardous to that species' physical well-being without violating the regulations.

Some commenters supported our proposed provisions as written. A large number of commenters stated that not all species require humidity levels within the 30 percent–70 percent range. Many commenters recommended that we require only that the appropriate relative humidity be left to professional judgment and be maintained at a level that ensures the health and well-being of the species housed, in accordance with generally accepted professional and husbandry practices. Upon review of the evidence presented in the comments, we agree that it is not appropriate or necessary to set specific upper and lower limits on relative humidity. We agree that the effect on animals of a particular level of humidity depends to a great degree on other factors, such as temperature and ventilation. We are therefore not including upper and lower humidity limits in this revised proposal.

However, we are providing in this revised proposal that, in those housing facilities where humidity can be controlled (indoor housing facilities and the sheltered part of sheltered housing facilities), that the relative humidity must be at a level that ensures the health and well-being of the species housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

A number of commenters took issue with our proposed requirement that indoor housing facilities, the sheltered part of sheltered housing facilities, and mobile or traveling housing facilities be sufficiently ventilated to minimize odors, drafts, ammonia levels, and moisture condensation. (In mobile or traveling housing facilities the minimizing of exhaust fumes would also be required.) The commenters expressed concern that the requirements would lead to significant disagreement as to the meaning of "minimize;" some commenters expressed doubt that odors could always be minimized. We are making no changes based on these comments. The provisions as proposed do not require the elimination of the objectionable odors, fumes, etc., only that they be held to minimal levels. We believe that such a performance standard can be met and enforced.

A number of commenters addressed our requirement that air, preferably fresh air, be provided by means of windows, vents, fans, or air conditioning. A small number of commenters recommended that fresh air always be provided. We do not believe that it would be practical to require that fresh air always be provided and are making no changes to our proposal based on these comments. A much greater number of comments recommended that we change our reference to "air" to read "ventilation." We agree that the word "ventilation" better encompasses the intent of our proposed provision, and are therefore revising our proposal to provide that ventilation must be provided by windows, doors, vents, fans, or air conditioning.

3. Lighting—Sections 3.76(c), 3.77(c), and 3.79(c)

We proposed to continue the requirement presently imposed upon indoor facilities in current § 3.76(c) to provide adequate light to permit routine inspection and cleaning of the housing facility, and observation of nonhuman primates. We proposed that this requirement would apply to the three types of enclosed housing facilities

included in the proposed regulations. We proposed in proposed §§ 3.76(c), 3.77(c), and 3.79(c) to require a daily lighting cycle of at least 8 consecutive hours of light and at least 8 consecutive hours of darkness each day in order to maintain a normal lighting cycle for the nonhuman primates' well-being. As we discussed in the supplementary information of our proposal, a diurnal lighting cycle is known to be necessary for nonhuman primates to maintain normal breeding practices and to promote their psychological well-being. We also proposed to continue to allow artificial light to be used, but proposed to specify that it must provide full-spectrum illumination. We proposed to retain safeguards against exposing nonhuman primates to excessive light and to apply them to all enclosed housing facilities.

A number of commenters addressed our proposed provision to require full-spectrum lighting. While a small number of commenters supported such a requirement, many commenters stated that full-spectrum lighting was unnecessary for the health and well-being of nonhuman primates. Others stated that it was impractical because such lighting fixtures, when shielded for sanitation purposes, will filter out certain wavelengths of light. Some commenters presented evidence that continued exposure to full-spectrum illumination, strictly defined, could actually harm the vision of animals. Upon review of the comments, we believe that the potential problems associated with full-spectrum lighting warrant our removing its requirement in our proposal, and we are doing so in this revised proposal.

Many commenters questioned the need for at least 8 consecutive hours of light and 8 consecutive hours of darkness each day, stating that such a specific timetable does not allow for professional judgment regarding the needs of specific species. We agree that the normal diurnal lighting cycle may vary from species to species and month to month and are therefore revising our proposal to provide that animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. In order to allow for professional judgment regarding the lighting needs of individual animals or species, we are proposing that lighting in animal facilities provide sufficient illumination to provide for the well-being of the animals, as well as to allow for good housekeeping practices, adequate inspection of animals, and adequate cleaning.

A number of commenters recommended that we provide a definition of excessive light. We believe that the term is self-explanatory; that it means a degree of light that it is detrimental to the well-being of the animals. Whether the light available is harmful to the animals would be determined on a case-by-case basis. Some commenters took issue with the statement in the supplementary information of our proposal that an animal housed in the top cage of a stack of cages near a light fixture would be exposed to excessive light. We are making no changes based on these comments. The provisions we proposed would prohibit exposing the animals to excessive light. In our supplementary information we provided just one example of a variety of situations we believe could constitute excessive light. We continue to believe that it is necessary for the health and well-being of nonhuman primates that they not be exposed to excessive light.

A small number of commenters recommended that we broaden our proposed requirements to require such features as providing animals a range of light levels from which to choose, and providing access to sunlight for all nonhuman primates. We do not believe that such provisions are practical or necessary and are making no changes based on these comments.

A number of commenters recommended that we provide the authority to make exceptions in lighting standards to the Committee at research facilities. The regulations in § 2.38(k)(1) of part 2 already provide that exceptions to the standards in part 3 may be made when such exceptions are specified and justified in the proposal to conduct an activity and are approved by the Committee.

Requirements for Outdoor or Partially Outdoor Housing Facilities

1. Shelter from the Elements—Section 3.77 (d) and (e); Section 3.78 (b) and (c)

Outdoor housing facilities cannot be temperature controlled. We proposed to allow only those nonhuman primates that are acclimated to the prevailing seasonal temperature and that can tolerate without stress or discomfort the range of temperatures, humidity, and climatic conditions known to occur at the facility at the time of year they are housed there to be housed in outdoor facilities, in order to protect their physical welfare. One commenter recommended that we use the same acclimation standards for nonhuman primates in outdoor facilities as we proposed for dogs and cats under

transport. Because of the significant differences between the species involved, and between housing conditions and transportation conditions, we are making no changes based on this comment.

As in current § 3.77 (a)–(c), our proposal provided that outdoor housing facilities must provide shelter from the elements and protection from various weather conditions, such as sun, wind, rain, cold air, and snow. For example, under our proposal, nonhuman primates would have to be provided with shade from the sun and protection from precipitation so that they may remain dry. This requirement appears in § 3.78(b) of the proposed rule. We proposed to require that the shelter provided be maintained in good repair, and that it be constructed in a manner and made of material that can be readily cleaned and sanitized in accordance with proposed § 3.75(c).

We proposed to make the requirement to provide protection from the elements applicable also to sheltered housing facilities. We proposed to require that nonhuman primates be provided shelter from the elements at all times. Accordingly, under our proposal, unless the nonhuman primates have continual ready access to the sheltered portion of the facility, some additional form of shelter would have to be provided that satisfies the requirements contained in paragraphs (a) through (e) of proposed § 3.77.

A small number of commenters specifically supported the provisions regarding shelters as written. Some commenters recommended that we delete the requirement for shelter at outdoor facilities. We believe that such shelters are necessary for the health and well-being of nonhuman primates housed in such facilities and are making no changes to our proposal based on these comments.

In proposed §§ 3.77(e) and 3.78(c), we proposed to require that the shelters in both sheltered and outdoor housing facilities be large enough to provide protection comfortably to all the nonhuman primates housed in the facility at the same time. As proposed, sheltered housing facilities and outdoor housing facilities would be required to have multiple shelters if there are aggressive or dominant animals present that might deter other nonhuman primates from utilizing the shelters when they so desire.

In this revised proposal, we are making certain wording changes to our revised proposal to clarify our intent regarding shelters in sheltered and outdoor housing facilities. In this

revision, we are providing that, in cases where aggressive or dominant animals are housed in the facility with other animals, the facility must provide either multiple shelters or other means to ensure that each nonhuman primate has access to shelter.

A number of commenters stated that the requirement for multiple shelters in certain situations should be deleted, because it would not eliminate the problem of some nonhuman primates being too intimidated by others to seek shelter. The commenters stated that there is a dominant animal in every social group, and that consequently, it would be impossible to guarantee that every animal would choose to join others in shelter. We are making no changes based on these comments. While we agree that it would be impossible to force every animal to take shelter, providing sufficient multiple shelters when aggressive or dominant animals are present would ensure that all nonhuman primates in the facility will have access to shelter.

A small number of commenters recommended that we rewrite the proposed provisions to specify that each outdoor housing facility have enough shelters to ensure that every animal is accommodated. We believe that this is what the proposed regulations would accomplish.

2. Perimeter Fence—Sections 3.77(f) and 3.78(d)

In proposed §§ 3.77(f) and 3.78(d), we proposed to require that unless a natural barrier exists that would restrict the animals to the housing facility and prevent unauthorized humans and animals from having contact with the nonhuman primates, a perimeter fence at least 6 feet in height be placed around the outdoor areas of sheltered housing facilities and outdoor housing facilities, and that it be placed at least 3 feet from the outside wall of the primary enclosure. In certain settings a perimeter fence is not needed because the animals are protected by natural barriers, such as moats or swamps surrounding the facility. As proposed, the exception for natural boundaries would be subject to the Administrator's approval. Under our proposal, the perimeter fence could be slatted, latticed or of other similar design, as long as it was designed and constructed in a manner that restricts unauthorized humans and animals from entering or having contact with the nonhuman primates, including animals capable of digging underneath it, and that prevents small animals the size of dogs, raccoons, and skunks from entering through it. We proposed to require that it be placed at least 3 feet

from the outside wall of the primary enclosure and explained that this is considered to be a sufficient safety zone between the nonhuman primates and the public and that it would allow sufficient room to use cleaning equipment necessary for cleaning the waste and refuse that nonhuman primates throw into it. We proposed that the fence would not be required if the outside walls of the primary enclosure were high enough and built in a manner that prevents contact with or entry by other animals. To avoid the need for a perimeter fence we proposed to require that the outside walls of the primary enclosure be made of a heavy duty material such as concrete, wood, metal, plastic, or glass, that prevents unauthorized entry by and contact with humans and animals.

A small number of commenters specifically supported these provisions as written. A number of commenters specifically opposed the provisions requiring a perimeter fence. Some commenters stated that requiring a fence at least 6 feet high would not necessarily keep unwanted animals from entering the area occupied by the nonhuman primates; that even a fence of that height could be breached by certain animals. Other commenters recommended that we remove the requirement that the fence be able to keep out unauthorized humans; that the security of a facility is rightfully the concern of the facility. While we continue to believe that a perimeter fence 6 feet high will in most cases be adequate to keep out unwanted species, we recognize that, depending on the configuration and location of the facility, and on the type of fence used, fences of other heights might be warranted or necessary in keeping out animals. Therefore, we are amending our proposal to require that in cases where a perimeter fence is required, it be of sufficient height to keep unwanted species out, and that it be constructed so that it protects nonhuman primates by preventing animals the size of dogs, skunks, and raccoons from going through it or under it and having contact with the nonhuman primates. Because we believe that in most cases it would take a fence at least 6 feet high to keep out unwanted species, we are also proposing to require that fences less than 6 feet in height must be approved by the Administrator.

In like manner, we are proposing in this revised proposal that the perimeter fence must be of sufficient distance from the outside wall or fence of the primary enclosure to prevent physical contact between animals inside the enclosure

and outside the perimeter fence. Under this revised proposal, such fences less than 3 feet in distance from the primary enclosure would have to be approved by the Administrator.

For the reasons discussed in this supplementary information under the heading "Housing Facilities: Structure; Construction," we are retaining the provision that the perimeter fence be able to prevent the entry of unauthorized humans. We are also retaining such a provision in the conditions necessary to make alternative barriers acceptable in lieu of perimeter fences.

A number of commenters recommended that perimeter fence requirements be standardized among species. We are making no changes based on these comments. The proposed regulations specify the need for a perimeter fence to keep out unwanted animals. Such a need exists for all nonhuman primates, and the type of fence used should not depend upon the species of nonhuman primates housed.

A number of commenters recommended that we modify our proposed provisions regarding fences to allow for local zoning regulations. We believe that any such local considerations are beyond the scope of these regulations, and we do not consider it appropriate to add such provisions to the regulations.

3. Additional Safety Requirement—Sections 3.77(g), 3.78(e), and 3.79(d)

We also proposed to add a requirement for facilities that are at least partially outdoors and are accessible to the public in order to protect nonhuman primates from the public and to protect the public from nonhuman primates. As proposed, public barriers would be required for sheltered housing facilities under proposed § 3.77(g), outdoor housing facilities under proposed § 3.78(e), and for mobile or traveling housing facilities under proposed § 3.79(e). The regulations we proposed would require barriers preventing unauthorized physical contact between the public and nonhuman primates for fixed public exhibits and traveling animal exhibits, at any time the public is present, both to protect the public and the nonhuman primates. We also proposed to require that nonhuman primates used in trained animal acts or uncaged public exhibits be under the control and supervision of an experienced handler or trainer whenever the public is present. We proposed to allow trained nonhuman primates used in animal acts and uncaged public exhibits to have physical contact with the public, as allowed under § 2.131, but only if the nonhuman

primates are under the direct control and supervision of an experienced handler or trainer at all times during the contact, in order to prevent injury to both the nonhuman primates and the public.

A small number of commenters recommended that the regulations prohibit all contact between nonhuman primates and the public. We agree that unauthorized contact must be prevented and believe our proposed provisions regarding barriers are necessary toward that end. However, it is not necessary to prohibit all contact between nonhuman primates and the public. Some commenters recommended we require that the barriers also restrict predators from easy access to the enclosures. We believe our proposed provisions regarding a perimeter fence address this issue and are making no changes to our proposal based on the comments.

Primary Enclosures

We proposed to revise completely current § 3.78, "Primary enclosures." We proposed to do so in accordance with the 1985 amendments to the Act. Under the amendments, the Secretary of Agriculture is directed to "promulgate standards to govern the humane handling, care, treatment, and transportation of animals by dealers, research facilities, and exhibitors." The standards must include minimum requirements "for a physical environment adequate to promote the psychological well-being of primates." (7 U.S.C. 2143(a)(2)(B)). Included among the primary enclosures subject to the regulations would be those used by circuses, carnivals, traveling zoos, educational exhibits, and other traveling animal acts and shows. As explained in greater detail below, we proposed different minimum space and environment requirements for research facilities, dealers, exhibitors, and traveling or mobile animal act exhibitors, in order to promote the psychological well-being of nonhuman primates and to provide for the nonhuman primates' minimum needs. Under our proposal, all primary enclosures would have been required to meet the proposed minimum requirements.

Our proposal was in contrast to current § 3.78, which provides general requirements for construction and maintenance of primary enclosures and uniform space requirements for every nonhuman primate housed in a primary enclosure.

We also proposed to add a subsection on social grouping of nonhuman primates within primary enclosures.

Primary Enclosures: General Requirements—Section 3.80

Primary enclosures are defined in part 1 of the regulations as "any structure or device used to restrict an animal to a limited amount of space, such as a room, pen, run, cage, compartment, pool, hutch, or tether." We proposed in § 3.80(a) to continue to require that primary enclosures be structurally sound and maintained in good repair to protect the animals from injury, to contain them, and to keep predators out, that they enable the animals to remain dry and clean, that they provide the animals with convenient access to clean food and water, that their floors be constructed in a manner that protects the animals from injury, and that they provide sufficient space for the nonhuman primates to make normal postural adjustments with freedom of movement.

We also proposed to require in proposed § 3.80(a) that the primary enclosures have no sharp points or edges that could injure the animals, that they keep unauthorized people and predators from entering the enclosure or having physical contact with nonhuman primates, that they provide shelter and protection from extreme temperature and weather conditions that can be dangerous to the animals' health and welfare, that they provide sufficient shade to protect all the animals contained in the enclosure at one time, and that they enable all surfaces to be readily cleaned and sanitized or replaced if worn or soiled.

These additional requirements were intended to provide more specific minimum criteria that must be satisfied by regulated persons maintaining nonhuman primates in order to provide for the welfare of the animals.

A small number of commenters specifically supported the provisions of § 3.80(a) as written.

In proposing that primary enclosures have floors that are constructed in a manner that protects the nonhuman primates from injuring themselves, we specified that such floors would have to protect against the nonhuman primates' having their appendages caught. A large number of commenters stated that such a provision would cause sanitation problems by restricting the elimination of fecal material in certain types of enclosures. We agree with the commenters and are therefore removing the requirement from proposed § 3.80(a) that floors of primary enclosures protect nonhuman primates from having their appendages caught, and are specifying instead only that the floors protect against injury.

A large number of commenters took issue with our requirements in proposed § 3.80(a) (iii) and (iv) that primary enclosures be constructed so as, among other things, to prevent the unauthorized release of nonhuman primates and to prevent the entry of unauthorized individuals. We continue to believe that such requirements would be necessary for the well-being of the animals in the enclosures, and are making no changes to our proposal based on these comments.

A number of commenters stated that certain wording within proposed § 3.80(a) was redundant. We believe that each of the provisions in proposed § 3.80(a) addresses a distinct need, and is necessary for proper enforcement.

A small number of commenters recommended that primary enclosure be required only to make it difficult for predators to enter, rather than prevent their entry. We believe such a change would not be in the best interests of the nonhuman primates and are making no change based on these comments. However, upon review of our proposal, we do not believe that merely preventing the entry of "predators" is sufficient to ensure the well-being of the animals in the enclosure. There may be situations where an animal might not be a "predator" of nonhuman primates in the strict sense of the word, but might nonetheless pose a risk to the nonhuman primates. We are therefore revising our proposal to provide that primary enclosures must keep other unwanted animals and unauthorized individuals from entering the enclosure or having physical contact with the nonhuman primates. We are using the term "unwanted animals" to allow for situations where nonhuman primates in adjacent cages provide beneficial contact, such as grooming, to each other.

A number of commenters stated that it was unnecessary to include a requirement that primary enclosures be constructed so as to keep nonhuman primates dry. We believe it is important to the health and well-being of the nonhuman primates that they remain dry and are making no changes based on these comments.

A large number of commenters stated that our requirements that primary enclosures provide adequate protection from the extremes of temperatures and the elements were redundant with those regarding housing facilities and therefore should be deleted. We disagree, and are making no changes based on these comments. In many cases, primary enclosures are not synonymous with a housing facility. Such primary enclosures must be

governed by their own set of standards to ensure the health and well-being of the animals contained.

Primary Enclosures: Social Grouping—Section 3.80(b)

We proposed to include a subsection of proposed § 3.80 "Primary enclosures," to emphasize that nonhuman primates must be grouped in a primary enclosure with compatible members of their species or with other nonhuman primate species, either in pairs, family groups, or other compatible social groupings, whenever possible and consistent with providing for the nonhuman primates' health, safety, and well-being, unless social grouping is prohibited by an animal care and use procedure and approved by the facility's Committee. We specified in our proposal that compatibility would be based upon generally accepted professional practices and upon observation of the nonhuman primates to determine that they are in fact compatible. We proposed this requirement based upon scientific evidence and our experience, both of which indicate that nonhuman primates are social beings in nature and require contact with other nonhuman primates for their psychological well-being. The expert committee convened by APHIS also recommended social grouping to promote the psychological well-being of nonhuman primates. Social deprivation is regarded by the scientific community as psychologically debilitating to social animals. Where social grouping would not be possible or would be determined by the attending veterinarian to be contrary to providing for the nonhuman primates' health, safety, and well-being as explained below, or would be prohibited by an animal care and use procedure approved by the research facility's Committee in accordance with part 2 of the regulations, we proposed to require that nonhuman primates be at least able to see and hear other nonhuman primates, unless this were also prohibited by an animal care and use procedure approved by the research facility's Committee. In this case, under our proposal, the isolated individually housed nonhuman primates would be required to have positive physical contact or other interaction with their keeper or with another familiar and knowledgeable person for at least one hour each day.

We received a large number of comments in response to proposed § 3.80(b). The comments received differed in the specific provisions of § 3.80(b) they addressed and varied widely in their recommendations. A large number of commenters supported

group housing in all or most cases. Some commenters recommended that the regulations prohibit individual housing of nonhuman primates, either in all cases or in every case except when veterinary care is required. Although we continue to believe that interaction with other nonhuman primates is an important factor in ensuring the animals' psychological well-being, we do not believe it is reasonable or in the best interests of every nonhuman primate to require group housing in all cases. Our revised proposal requires that an environment enhancement plan, discussed below in this supplementary information, include specific provisions to address the social needs of nonhuman primates of species known to exist in social groups in nature.

One commenter recommended that it be required that a panel of experts evaluate each situation where a primate is individually housed in an exhibitor facility to determine if such housing is appropriate. While we believe that a panel is certainly one way to determine if a primate should be housed individually, we do not believe that it would be necessary for the well-being of the animals to specify that all decisions regarding individual housing of nonhuman primates at exhibitor facilities be made by a panel, and are making no changes to our proposal based on this comment.

A great number of commenters opposed our provisions regarding group housing of nonhuman primates. The commenters varied in the reasons provided for their opposition. A large number of commenters stated that group housing could significantly interfere with research where social grouping, or the lack of it, is a factor. We disagree with this assertion. Under § 2.38(k) (1), research facilities are required to comply with the standards in Part 3, except in cases where exceptions are specified and justified in the research proposal to conduct the specific activity and are approved by the facility's Committee. This provision exists to safeguard approved research.

A large number of commenters expressed concern that social grouping would endanger the animal's welfare by increasing noise and fighting. Other commenters stated that behavioral differences among varying species requires that discretion be used in deciding whether to employ group housing. While we believe, as noted, that social interaction is important to nonhuman primates, we recognize that situations may arise where it is more harmful than helpful to house animals in groups. In this revised proposal, we

have reformatted and reworded the proposed provisions regarding social grouping, to include them in a revised § 3.81, titled "Environment Enhancement to Promote Psychological Well-Being." Social interaction is an integral part of the psychological well-being of nonhuman primates, and we believe it is appropriate to address such social grouping in the context of an overall approach to promoting the psychological well-being of nonhuman primates. In newly proposed § 3.81, regarding psychological well-being, we are proposing that each regulated facility must develop a plan for environment enhancement to promote the psychological well-being of nonhuman primates, discussed below in this supplementary information, and that the plan, among other things, must include specific provisions to address the social needs of nonhuman primates of species known to exist in social groups in nature. We are proposing that such specific provisions must be in accordance with currently accepted standards, as cited in appropriate professional journals or reference guides, as directed by the attending veterinarian. We are also proposing that such plan may provide for exceptions to such social grouping in cases where it would be injurious to the nonhuman primates. We believe that the regulations we are proposing in this revised proposal provide the attending veterinarian the necessary latitude to determine whether group housing would endanger the health, safety, and well-being of particular nonhuman primates. Additionally, the regulations in this revised proposal would make the appropriateness of group housing a factor that must be considered in a facility's plan to promote the psychological well-being of the animals housed.

In order to make clear situations where group housing would not be appropriate, we are proposing in this revised proposal to specify in § 3.81(a), regarding environment to promote the psychological well-being of nonhuman primates, that the environment enhancement plan may provide that: (1) A nonhuman primate that exhibits vicious or overly aggressive behavior, or is debilitated because of age or other conditions should be housed separately; (2) a nonhuman primate or group of nonhuman primates that has or is suspected of having a contagious disease must be isolated from healthy animals in the colony as directed by the attending veterinarian; and (3) nonhuman primates may not be housed with other species of nonhuman

primates or animals unless they are compatible, do not prevent access to food, water, and shelter by individual animals, and are not known to be hazardous to the health and well-being of each other. We are also proposing in this revised proposal that compatibility of nonhuman primates must be determined in accordance with generally accepted professional practices and actual observations, as directed by the attending veterinarian, to ensure that the animals are compatible. Additionally, we are proposing to require that individually housed nonhuman primates be able to see and hear nonhuman primates of their own or compatible species, unless the attending veterinarian determines that it would endanger their health, safety, or well-being. In our original proposal, we discussed the issue of animals held for "quarantine." However, because the term quarantine does not appear in this revised proposal, such a definition is unnecessary.

A large number of commenters supported the proposed requirement that individually housed nonhuman primates lacking interaction with other nonhuman primates receive positive physical contact or other interaction with their keeper or other familiar and knowledgeable person. Many commenters, however, opposed this requirement, and expressed concern that such a requirement could place the person involved at physical risk. We believe we have addressed these concerns in the process of reformatting and revising the provisions regarding social grouping in the context of psychological well-being. These revised provisions regarding such individually housed nonhuman primates are discussed below under the heading "Environment Enhancement to Promote Psychological Well-Being." Similarly, a number of commenters expressed concern that group housing of nonhuman primates would result in increased physical and mental stress and trauma to animal handlers. While we agree that housing primates in groups presents some logistical concerns that are not present when animals are housed individually, we believe that such concerns can be addressed by proper training of handlers and appropriate housing configurations.

A small number of commenters recommended that nonhuman primates be permitted to be caged individually in cases where experimentation lasts 12 months or less. We are making no changes to our proposal to establish such a provision. The commenters presented no evidence to support the

conclusion that individual housing for 12 months or less is not psychologically distressing to nonhuman primates, and we are not aware of scientific data supporting such a conclusion.

A small number of commenters recommended that compatible groups of nonhuman primates be required to remain together and that it be required that primate infants remain with their dam for at least the first two years of life. While we encourage such practices where possible, we do not believe they would be practical in all cases and are making no changes to the proposal based on these comments.

A number of commenters stated that most veterinarians are not trained regarding social grouping of nonhuman primates, and that decisions regarding appropriate social grouping would be more appropriately left to an animal psychologist. We disagree with this assertion and are making no changes to our proposal based on these comments. Based on our experience enforcing the regulations, we believe that most attending veterinarians are familiar with and knowledgeable in the behavioral patterns of the nonhuman primates they are responsible for and are capable of making the professional judgments provided for under this revised proposal. A small number of commenters stated that the decision to individually house nonhuman primates should be reviewed monthly. We do not believe that such a requirement would be practical and are making no changes based on the comment.

A small number of commenters opposed what they considered "loopholes" in the proposed regulations that exempt research facilities from meeting specific standards, in cases where such an exemption is part of a research proposal approved by the facility's Committee. We are making no changes to our proposal based on these comments. Our mandate to establish and enforce animal welfare regulations under the Act makes it clear that the regulations shall not interfere with research efforts.

A small number of commenters expressed concern that nonhuman primates housed in stable family groups may inbreed, with negative consequences on captive conservation goals. We believe that such concerns are best addressed through husbandry management practices, rather than through the regulations.

A small number of commenters recommended that animals in group housing be of the same species. While we recognize that limiting group housing to the same species may be

advantageous in some cases, we see no reason to require segregation of species that are compatible in nature.

Primary Enclosures: Space and Physical Environment—Section 3.80 (c) and (d)

As stated above, in our original proposal we proposed to revise completely the minimum space requirements for nonhuman primates set forth in current paragraphs (1) and (2) of § 3.78(b). The current requirements specify that primary enclosures be "constructed and maintained so as to provide sufficient space to allow each nonhuman primate to make normal postural adjustments with adequate freedom of movement" and provide a minimum floor space equal to an area of at least three times the area occupied by each animal when standing on four feet, regardless of the size or condition of the animal. We also proposed to add requirements for enhancing the environment of the primary enclosures used for maintaining nonhuman primates, in accordance with the 1985 amendments to the Act.

In preparing our proposal of minimum requirements for a physical environment adequate to promote the psychological well-being of nonhuman primates, we utilized the Agency's expertise and experience in regulating the humane handling, care, and treatment of nonhuman primates. Because this was the first occasion the Agency had been charged with responsibility for regulations to promote the psychological well-being of nonhuman primates, we considered it important and instructive to consult with experts and representatives of regulated industries. We requested their advice on the minimum space and other environmental requirements they considered necessary to meet the psychological needs of nonhuman primates.

As stated previously in this supplementary information, the National Institutes of Health (NIH), Public Health Service recommended experts to advise us regarding minimum standards for promoting the psychological well-being of nonhuman primates. A group of 10 nonhuman primates experts was selected and was asked to formulate a recommendation for these minimum standards. We also requested the American Association of Zoological Parks and Aquariums (AAZPA) to recommend minimum requirements. The consensus of opinion was that nonhuman primates need physical and mental stimulation for their psychological well-being, to enhance their developmental growth, and to

make them better socially adjusted. The reports indicated that the need for stimulation could be met by allowing them sufficient space to engage in species-typical behavior, by providing enclosure complexities such as perches and swings, by providing manipulative objects (such as balls and other objects), and by varying the methods of feeding (such as allowing the nonhuman primates to forage for food). The reports indicated that social interaction and exercise are equally necessary to promote their psychological well-being and that social grouping increases the nonhuman primates' physical activity. The reports differed, however, in their recommendations of the precise means, or combination of means, considered necessary to promote the nonhuman primates' psychological needs. Based on these reports and our observation of and experience with nonhuman primates, and considering the differences of opinion among the various professional communities maintaining nonhuman primates, we determined that nonhuman primates have an acknowledged need for physical and mental stimulation, and that their needs can be met in various ways.

We considered the environmental conditions under which nonhuman primates are maintained by regulated persons, and proposed minimum standards for primary enclosures used by research facilities (including Federal research facilities), dealers, exhibitors, and traveling or mobile animal act exhibitors. We proposed four sets of minimum standards, based on the determination that the environment in which a nonhuman primate is maintained may satisfy some of its needs and may require providing other forms of stimulation or environmental enhancements to satisfy other needs.

Accordingly, as explained in greater detail below, we proposed that primary enclosures used to maintain nonhuman primates must provide sufficient space, as set forth in our proposal, and that nonhuman primates must have exercise, social interaction (or human interaction), and environmental enrichments, consistent with their safety, health, and well-being. We proposed that the minimum amount of space to be required for each nonhuman primate, and the kind and amount of other means of meeting psychological needs required would vary among the four sets of minimum standards and

would depend upon all the forms and opportunities for physical and mental stimulation presented to nonhuman primates in the environments typically provided by research facilities, dealers, exhibitors, and mobile or traveling animal act exhibitors, respectively.

A large number of commenters stated that minimum space requirements for nonhuman primates should be the same for all types of regulated facilities, and cited the lack of scientific consensus as to the need for differing space requirements for differing facilities. In continuing to analyze this issue, we have carefully reviewed the comments received, as well as other scientific data available to us, and have continued our ongoing consultation with HHS. The conclusion we have reached at this time is that although adequate space is critical to both the physical and psychological well-being of nonhuman primates, the issue of what constitutes "adequate space" can be meaningfully addressed only in the context of other enrichments of a primate's environment, particularly interaction with other nonhuman primates or humans. We believe that each primate's needs, in whatever type of facility it is housed, must be assessed by knowledgeable professionals, and must be met accordingly. In this revised proposal, therefore, we are proposing one set of minimum space requirements for all types of regulated facilities. At the same time, however, we are proposing to require that all regulated facilities must develop, document, and follow a plan for environment enhancement adequate to promote the psychological well-being of nonhuman primates in their facility. (The revised provisions for psychological well-being are discussed below under the heading "Environmental Enhancement to Promote Psychological Well-Being.") We encourage comments from the public that respond to the provisions of this revised proposal, and that provide further data regarding the specific space needs of nonhuman primates in each type of facility.

The minimum space requirements we are proposing in § 3.80(b)(1) of this revision are the same as those we originally proposed for research facilities as being adequate for nonhuman primates, except for one change. In response to many comments on nonhuman primate cage size requirements, we are modifying the

weight limit of Group 6, as set forth in a table in proposed § 3.80(c)(1), by eliminating the top limit of 88 lbs. (20 kg), and by removing the proposed Group 7 for nonhuman primates weighing in excess of 88 lbs. (20 kg). Upon review of the evidence presented to us, we have determined that it may not be practical or feasible to establish specific cage size requirements for the larger great apes.

Current evidence available to use from regulated entities suggests that current technology does not exist for effective restraint of animals maintained in 50 square foot cages (as set forth in proposed Group 7). Commenters responding to our proposed rule provided evidence to indicate that such proposed Group 7 cage standards might actually discourage the progressive trend toward group housing in permanent facilities. Additionally, during our most recent consultations with HHS, that agency indicated their desire that, until their Guide might be further revised, the enclosure standards set forth in the Guide, parallel in all cases except proposed Groups 6 and 7 to those set forth in our proposal, not be modified.

Therefore, after further consideration of the unique needs of larger great apes, we are proposing to require in § 3.80 of this revised proposal that dealers, exhibitors, and research facilities that maintain great apes weighing over 110 lbs. (50 kg), must provide such animals an additional volume of space to allow for normal postural adjustments. We are also requiring in § 3.81 of this revised proposal that these larger great apes must be provided additional opportunities to express behavior typical of their species, as discussed in this supplementary information under the heading "Environment Enhancement to Promote Psychological Well-Being." We believe that these requirements will meet statutory requirements that encourage the further study of environment designs that meet the special social and behavioral needs of these animals.

The minimum enclosure sizes we proposed for research facilities, and which we are now proposing for all facilities with the changes discussed above, are based on the typical weight of the species, except for brachiating species and great apes, in accordance with the following table:

Group	Weight lbs. (kg.)	Floor Area/ Animal ft. ² (m ²)	Height in. (cm.)
1.....	Under 2.2 (under 1).....	1.6 (0.15)	20 (50.8)
2.....	2.2-6.6 (1-3).....	3.0 (0.28)	30 (76.2)
3.....	6.6-22.0 (3-10).....	4.3 (0.40)	30 (76.2)
4.....	22.0-33.0 (10-15).....	6.0 (0.56)	32 (81.28)
5.....	33.0-55.0 (15-25).....	8.0 (0.74)	36 (91.44)
6.....	over 55.0 (over 25).....	25.1 (2.33)	84 (213.36)

The table above includes a correction of our original proposal regarding weights in Groups 2 and 3.

The minimum floor area and height that we are proposing were also recommended by the expert committee on nonhuman primates as sufficient to promote the psychological well-being of nonhuman primates.

Under this proposal, nonhuman primates would be categorized into these six groups by the typical weight of animals of their species, except for infants (up to 6 months of age) and juveniles (6 months to 3 years of age) of various species, which may weigh so much less than adults of their species that they are grouped with lighter weight species unless they obviously require greater space to make normal postural adjustments and movements, and except for brachiating species and the larger great apes. Brachiating species are those that typically hang or swing by their arms so that they are suspended in the air and fully extended. We are including the following as examples of the types of nonhuman primates that fall into each group:

- Group 1—Marmosets, Tamarins, and infants (less than 6 months of age) of various species.
- Group 2—Capuchins, Squirrel Monkeys and species of similar size, and juveniles (6 months to 3 years of age) of various species.
- Group 3—Macaques and African species.
- Group 4—Male Macaques and large African species.
- Group 5—Baboons and nonbrachiating species larger than 33.0 lbs. (15 kg.).
- Group 6—Great Apes greater than 55.0 lbs. (25 kg), except as provided for Great Apes weighing over 110 lbs. (50 kg), and brachiating species.

We have determined it appropriate to provide guidelines by proposing these six weight groups. In most instances, the specified dimensions for the various species would be sufficient to promote the nonhuman primates' psychological well-being, and the table could be used to determine the minimum space requirements for each species. However, if a nonhuman primate were unable to make normal postural adjustments and movements, or could not do so without difficulty, notwithstanding the table, it

would have to be provided greater space.

The space requirements are minimum standards that must be provided to each nonhuman primate contained in a primary enclosure, unless otherwise specified. Consequently, if two nonhuman primates are housed together in one enclosure maintained by a research facility, the minimum floor area would be the sum of the minimum floor area space requirements that must be provided to each animal. However, in the case of mothers with infants less than 6 months of age, the space and height requirements would be those required for the mother. The minimum height for the animals would be the minimum height requirement for the largest nonhuman primate in the enclosure, not double that height as proposed in our original proposal. This change regarding height is based on a number of comments, which upon review we concur with, that indicate that, although increasing the floor space for group housing is necessary, doubling the height for two animals has questionable value. Also, the regulations would not allow the size of a primary enclosure to be reduced because it contains a suspended fixture, such as a swing or a perch, except that low perches and ledges would be counted as part of the floor space.

A small number of commenters specifically supported the minimum space requirements we originally proposed for primary enclosures at research facilities as written. A much larger number of commenters took issue with the minimum space requirements we proposed for research facilities, and which we are now proposing for all facilities. A large number of commenters stated that our proposed cage sizes were too small. An equally large number of commenters stated that we were proposing minimum sizes in excess of those necessary, or that we were proposing standards that were arbitrarily arrived at. Some commenters recommended that we set no specific minimum standards, and rely instead of professional discretion in every case. We believe that the minimum space requirements that were proposed for research facilities, and that are now

being proposed for all facilities, are reasonable and adequate. We base this belief on our own experience enforcing the regulations, on expert recommendations received from the team of primate experts discussed above, and on our ongoing consultation with HHS.

Some of the comments received regarding the space requirements we originally proposed for research facilities stated that the grouping categories did not allow for variations in body configurations of animals, or for situations such as unusually light animals of a certain species, such as young nonhuman primates. We believe that the general physiognomy of nonhuman primates makes grouping by weight the most appropriate and practical method of categorization. Further, in footnote 2 to § 3.80 of our proposed rule, we noted that, although species categories for each weight group were presented as guidelines, infants and juveniles would normally fall into a lighter weight category than would older members of the species. One commenter, in reference to that footnote, stated that it should be changed to reflect the fact that a primate will grow and will have to be moved to a larger cage in a short time. We believe that such a necessity is self-evident and does not need to be included in the regulations.

A small number of commenters recommended that individually housed nonhuman primates be placed in primary enclosures with minimum dimensions for only short periods of time, and only for specified reasons—such as due to approved protocols or normal veterinary care requiring isolation. While we agree that individually housed nonhuman primates require additional enrichment for their psychological well-being, we believe such enrichment would be provided for under this revised proposal, as discussed below under the heading "Environment Enhancement To Promote Psychological Well-Being."

Many commenters stated that in proposing minimum space standards for research facilities, now proposed for all facilities, the Department had ignored

activity typical of varying species. We agree that the proposed space requirements alone do not address the issue of activities particular to varying species. However, as discussed below under the heading "Environment Enhancement To Promote Psychological Well-Being," each regulated facility would be required to develop a plan for promoting the needs of the nonhuman primates housed in the facility. The plan would, we believe, be the most practical way of addressing species-typical activity. However, we invite and encourage the submission of scientific data regarding appropriate cage dimensions based on species-typical activities. We will examine such data carefully in the development of a final rule based on this proposed rule.

A number of commenters stated that primate cage dimensions should be based on whether the species is arboreal or terrestrial. We do not believe that such considerations would be practical. In most cases, nonhuman primates are neither exclusively arboreal nor exclusively terrestrial, and basing cage sizes on such considerations would not be feasible.

We received some comments recommending that determining appropriate space requirements should be left to the attending veterinarian, in accordance with generally accepted professional and husbandry practices. While we agree that the attending veterinarian should be given some latitude in determining cage size, we believe that such decisions should be made in the context of specific minimum space requirements that would otherwise be required. We are therefore proposing to include § 3.80(b)(4) of this revised proposal that, in the case of research facilities, any exemption from the specified space requirements would have to be required by a research proposal or the judgment of the attending veterinarian, and be approved by the facility's Committee. In the case of dealers and exhibitors, any exemption would have to be required in the judgment of the attending veterinarian, and would have to be approved by the Administrator.

Some commenters stated that the minimum space tables in the original proposal were difficult to interpret. We do not believe that the table we proposed for research facilities was difficult to interpret and must assume the commenters were referring to the more complex table we proposed for exhibitors, which has been deleted in this revised proposal.

A number of commenters opposed our proposed requirement that, when more than one nonhuman primate is housed in

a primary enclosure, the minimum space provided be the sum of the minimum floor space requirements that must be provided for each nonhuman primate housed in the enclosure, and double the minimum height requirement for the largest nonhuman primate housed in the enclosure. The commenters stated that such a formula would not take into account variables among individual animals and species, could lead to unworkable housing situations, and might reduce research conducted to find data to define space requirements or cage enrichments. As discussed above, the requirement regarding space for groups housing we are proposing in this revised proposal does not include doubling the height of the enclosure when more than one primate is housed. However, we continue to believe that it is appropriate to provide each primate that is housed in the enclosure the minimum amount of floor space it would be entitled to if it were housed separately. We do not believe that the proposed specific minimum will have a significant negative effect on research regarding space requirements. On the contrary, we would welcome additional data regarding space requirements in our continuing efforts to provide appropriate standards.

A small number of commenters stated that it would be inappropriate to require a minimum of 84" height for categories 6 and 7, because a cage that size would not fit through an 84" door frame due to the door jam or floor material. We believe that this concern does not warrant our revising our proposal regarding Group 6. (As discussed above, this revised proposal does not contain a Group 7.) The recommended heights are based on NIH guidelines, which are already followed by many members of the research community. Further, we do not believe that the problem raised by the commenters is a significant practical one that will arise very frequently.

Several commenters, referring to the minimum space requirements we proposed for exhibitor facilities, stated that exemptions to the minimum space requirements should be allowed in for medical reasons and in cases where young nonhuman primates are being hand-reared. We believe that we have largely addressed the commenters' concerns by revising our proposal to eliminate the space standards for exhibitors addressed in the comments. Further, it has been our policy, in cases where the attending veterinarian thinks it necessary for medical reasons, to allow movement of nonhuman primates to alternatively sized cages on a short-term basis.

In our proposal, we stated that we encourage the design and development of primary enclosures that promote the psychological well-being of nonhuman primates by providing them with sufficient space and unrestricted opportunity for movement and exercise, and by allowing them to interact physically and socially with other nonhuman primates. Accordingly, we proposed to allow the use of primary enclosures that do not precisely meet the space requirements otherwise required of research facilities upon application to the Administrator for permission. Under our proposal, an applicant would be required to demonstrate both in writing and through use of a photographic aids that the proposed primary enclosure provides sufficient space and is designed so that the nonhuman primates can express species-typical behavior. A small number of commenters addressed these proposed provisions, specifically in regard to "pole housing." Most of these commenters opposed pole housing; one supported pole housing; and one recommended that pole housing be reviewed on a case-by-case basis. As originally proposed, and as retained in this revised proposal, all approval or denial of alternative housing would be done on a case-by-case basis.

In this revised proposal, we have made several changes to our original proposal regarding the approval of alternative housing. We are removing the specific requirements that the application for approval include written and photographic details. While we would continue to require such information in most cases, we recognize that other media, such as video tape, could be used to demonstrate the efficacy of alternative housing. It would be decided on a case-by-case basis whether the information submitted was sufficient for a decision to be made. Also, in order to allow for increased involvement by the Committee at research facilities, we are proposing to provide that approval of alternative housing at research facilities would be the responsibility of the facility's Committee. The use of such alternative housing by dealers and exhibitors would be dependent upon approval of the Administrator.

Variances From Minimum Space Requirements—Section 3.80(e)

In our proposed rule, we proposed procedures whereby variances from the proposed regulations could be requested and, if justified, approved by the Administrator. Under our proposal, such variances would allow an eligible

registrant or licensee to continue operating, even though not fully in compliance with the minimum space requirements for nonhuman primates. Under our proposal, a variance would be limited in scope both as to time and to the primary enclosures covered by it, and would specify the portions of the applicant's facilities to which it applied. In this revised proposal, we are not including provisions for variances. As discussed above, we believe that appropriate minimum space requirements can be addressed meaningfully only in the context of all forms of psychological enrichment provided the nonhuman primates. As discussed below, in this revised proposal, instead of proposing across-the-board requirements for activities such as exercise, we are requiring that facilities develop and document a plan to promote the psychological well-being of nonhuman primates. With regard to certain areas, such as exercise and enrichments, we would make it the responsibility of the facility to make available a plan for reaching that goal. In light of the removal of many of the across-the-board space requirements that were in our original proposal, and in light of the availability of primary enclosures meeting our proposed minimum space standards, we believe that it is not necessary to provide for variances regarding minimum space requirements.

Environment Enhancement To Promote Psychological Well-Being—Section 3.81

In proposed § 3.81, "Additional requirements for research facilities," we proposed environmental enrichments that research facilities would be required to provide, in addition to the minimum space requirements contained in proposed § 3.80(c)(1). We did so because the Animal Welfare Act, as amended, and the regulations contained in Part 2 of the Animal Welfare regulations impose specific duties on research facilities holding animals for research, testing, or teaching that are not imposed upon other regulated persons or industries, and that can affect their determination of the specific means employed to promote the psychological well-being of nonhuman primates.

After considering all the information available to us, including the report of the expert committee on nonhuman primates, we proposed the following minimum requirements to promote the psychological well-being of nonhuman primates in accordance with the Act, as amended. We set forth the proposed requirements in addition to the minimum

space requirements set forth in proposed § 3.80(c)(1).

We proposed that environmental enrichments must be provided by research facilities so that the nonhuman primates can engage in species-typical behavior and receive sufficient physical and mental stimulation at all times. In proposed § 3.81(a)(1), we provided examples of the kinds of enrichments that would be required under our proposal, including: (1) Perches, swings, mirrors, and other cage complexities; (2) toys or objects to manipulate; and (3) varied methods of feeding. We proposed to require in proposed § 3.81 that research facilities house nonhuman primates in social groupings in primary enclosures whenever possible, to increase their physical activity and for their psychological well-being.

We proposed additional requirements applicable to individually housed nonhuman primates. In order to ensure that these nonhuman primates have sufficient opportunity for physical activity, we proposed to require that they be released for at least four hours of exercise each week into an area that has at least three times the floor area and twice the height of their primary enclosure. Under the provisions we proposed, release would not be required if they are maintained in a primary enclosure with other nonhuman primates, or if they are maintained in a primary enclosure that is at least twice as great as that required for the species, because they would have greater opportunities to engage in physical activity on an ongoing basis. Under the regulations we proposed, nonhuman primates could be placed with compatible species during the required release period. This social interaction would promote their psychological well-being and is known to increase their physical activity.

A small number of comments received in response to our proposal asked that we define "socialization" and "psychological well-being." Research in this field is continuing, and additional data is being developed on an ongoing basis. In many cases, it is possible to assess that the psychological well-being of a primate is not being promoted when that primate exhibits what is considered abnormal behavior. What actually constitutes psychological well-being in each species and each primate, however, is difficult to define. As an agency, we are mandated by Congress to establish standards to promote the psychological well-being of nonhuman primates, even though there is disagreements as to the meaning of the term and how best to achieve it. It

appears obvious from information received from the expert committee on primates, consultations with HHS, other experts in primates, and the large number of comments received on the subject, that the psychological well-being of nonhuman primates involves a balance of several factors or areas of concern. This concept involves sufficient space for the animals; methods to stimulate the animals and occupy some of their time, both physically and mentally (i.e., environment enrichment); and methods of social interaction with other nonhuman primates or humans.

In this revised proposal, based on comments received and on our ongoing analysis of all other scientific evidence available to us, we have made certain changes to our original proposal regarding the methods research facilities would have to use in meeting the requirements of promoting the psychological well-being of nonhuman primates. Additionally, we are now proposing to apply those revised provisions regarding psychological well-being to dealers and exhibitors, as well as to research facilities. As we discussed earlier in this supplementary information, the scientific evidence available to us indicates that it is the combination of adequate space and environmental enrichments that is integral to promoting the psychological well-being of nonhuman primates. Because we are proposing to apply to other regulated entities the same minimum space requirements we originally proposed for research facilities, we believe it is appropriate and necessary to apply the same minimum standards regarding psychological well-being to each of these regulated entities. These proposed standards would take the place of the exercise and enrichment provisions we originally proposed for research facilities, exhibitors, and dealers. Additionally, in order to emphasize that the promotion of the psychological well-being of nonhuman primates is best achieved by a combination of factors, we are heading § 3.81 in this revised proposal "Environment enhancement to promote psychological well-being."

In response to § 3.81(c) in our original proposal, many commenters expressed concern that our proposed requirements for psychological well-being did not allow enough room for professional discretion at the facility level as to which forms of enrichment might be unnecessary or even harmful to individual animals or species. Many commenters recommended that species-typical activities be at the discretion of the attending veterinarian, because

some of these behaviors are harmful, and that we require only that the physical environment be enriched by providing means of expressing noninjurious species-typical activities at the discretion of the attending veterinarian. Many commenters stated that our proposed exercise standards were based on insufficient scientific documentation; that exercising nonhuman primates could cause trauma to both animals and caretakers; that the regulations should allow for exemption from socializing and exercising nonhuman primates based on the judgment of the attending veterinarian and, at research facilities, on the judgment of the facility's Committee; that determining "compatibility" of other different animals when released together for exercise would be difficult and time consuming; and that group exercise would pose a health risk to the animals involved. We have carefully analyzed these comments, and believe we have addressed many of the commenter's concerns through the changes we are making to our proposal, as described below.

Many commenters supported the provisions in proposed § 3.81(c) as written. Several felt they were inadequate. Others, while essentially supporting the proposed provisions, recommended changes to require more specificity regarding the methods of enrichment required, or to lengthen or establish specific timetables for the proposed exercise periods. A number of commenters either questioned our statutory authority to establish regulations governing exercise and social interaction, expressed opposition to "excessive" or "unscientific" regulations regarding the psychological well-being of nonhuman primates, or stated that standards regarding psychological well-being should apply only to nonhuman primates housed for specified periods of time. A number of commenters expressed concern that exercise requirement would interfere with research.

The promotion of the psychological well-being of nonhuman primates is a critical component in our rewriting of the animal welfare regulations, and is one that we are specifically mandated to address under the Act. Statutorily, we have the responsibility and obligation to establish such provisions as we believe are necessary for a physical environment to promote the animals' psychological well-being, but do not have the authority to interfere with approved research procedures. As discussed above, a mechanism exists in the regulations to exempt research

facilities from specific provisions in the case of approved research proposals. As noted above, the issue of what constitutes psychological well-being, and how best to promote it, is an area that continually welcomes new research data. One of the challenges of establishing regulations governing psychological well-being is to arrive at regulations that are practical and enforceable, while leaving room for professional discretion in the case of individual animals and species.

We have carefully reviewed all of the comments we received regarding this issue. As noted above, we have conducted such a review while continuing to analyze all other scientific data available to us, and while continuing our ongoing consultation with other Federal agencies. Based on this review, analysis, and consultation, we are revising our proposal to propose provisions that would apply to all dealers, exhibitors, and research facilities as discussed in the following paragraphs. In proposing these revised provisions, we invite and encourage further scientific data regarding the proposed provisions and the psychological well-being of nonhuman primates in general.

Section 3.81 of our proposal was titled "Additional requirements for research facilities." As discussed above, in this revised proposal, we would title § 3.81 as "Environment enhancement to promote psychological well-being." In the introductory text to that section, we would provide that dealers, exhibitors, and research facilities must develop, document, and follow a plan for environment enhancement adequate to promote the psychological well-being of nonhuman primates. We would require that such plan be in accordance with the currently accepted professional standards as cited in appropriate professional journals or reference guides and as directed by the attending veterinarian. By providing for such a plan, we believe that the psychological well-being of nonhuman primates would be promoted, while still leaving professional discretion as to the most appropriate means of promoting the well-being of particular animals or species. We would also require that the plan be made available to APHIS, and, in the case of research facilities, to officials of any pertinent Federal funding agency.

As proposed, it would be required that the plan address certain specified areas, including: (1) Social grouping; (2) environmental enrichment; (3) special consideration of nonhuman primates requiring special attention; and (4)

restraint devices. We believe that each of these is an important area that needs to be addressed in determining how best to promote the psychological well-being of nonhuman primates.

Social grouping. The provisions we are proposing regarding social grouping in proposed § 3.81(a), as revised, and the comments we received regarding social grouping in our original proposal, are discussed above under the heading "Social Grouping."

Environmental enrichment. In our original proposal, we provided for multiple enrichments of the environment of nonhuman primates in proposed § 3.80(c)(2)(iii) for dealers, proposed § 3.80(c)(4)(ii) for certain nonhuman primates housed by mobile or traveling animal act exhibitors, and proposed § 3.81(a)(1) for research facilities. Many commenters specifically supported our proposed requirements for environmental enrichments. Some commenters stated that they did not agree that it was necessary for social enhancement to place playthings or toys in cages, or stated that determining which environmental enrichments were most appropriate would require prolonged experimentation. Many commenters questioned the need to provide examples of environmental enrichments in the regulations, and recommended instead that we rely on the discretion of the attending veterinarian.

Upon review of the comments, we continue to believe that the best scientific evidence available demonstrates the effectiveness of environmental enrichments in promoting the psychological well-being of nonhuman primates. We also believe that by incorporating the need for environmental enrichments into the facilities plan for promoting the psychological well-being of the animals, the regulations would provide the opportunity for professional discretion regarding the well-being of particular animals or species. Therefore, in revised § 3.81(b), we are proposing to require that the plan discussed above include provisions for enriching the physical environment in primary enclosures by providing means of expressing noninjurious species-typical activities, and to provide that species differences should be considered when determining the type or methods of enrichment. We continue to believe that it is beneficial to provide examples in the regulations of types of enrichment that have been proven by research to be effective in promoting the psychological well-being of nonhuman primates. Therefore, we would provide in the proposal that

examples of environmental enrichments include providing perches, swings, mirrors, and other increased cage complexities; providing objects to manipulate; varied food items; using foraging or task-oriented feeding methods; and providing interaction with the care giver or other familiar and knowledgeable person consistent with personnel safety precautions.

Special considerations. In § 3.81(c) of this revised proposal, we are proposing that certain categories of nonhuman primates must receive special attention regarding enhancement of their environment. In § 3.81(a)(4) of our original proposal, we proposed to require research facilities to provide for the special psychological needs of (1) individually housed nonhuman primates that are infants or juveniles, (2) those that are used in research that does not provide for much activity, and (3) those showing signs of psychological distress. We proposed to require that they consult with the attending veterinarian, who would instruct the facility as to the additional environmental enrichments that must be provided to provide for the nonhuman primates' psychological well-being. We specifically identified these three categories of nonhuman primates in the proposed regulations because we concur with the expert committee on nonhuman primates that they require additional consideration of their needs to promote their psychological well-being. As we discussed in the **SUPPLEMENTARY INFORMATION** of our proposal, infants and juveniles are in the formative period of their development growth and require physical and mental stimulation for normal development. They also require social interaction with other nonhuman primates so that they can function in accordance with the typical social behavior for their species. Similarly, those required to be inactive lack the physical activity and stimulation considered important for their psychological well-being, and their needs must be provided for in different ways. The special needs of those showing signs of psychological distress must also be individually addressed to prevent the development of psychological disorders. Because the needs and circumstances of individually housed nonhuman primates falling under any of these categories will differ on an individual basis, we stated in our proposal our belief that it is appropriate to require that research facilities consult with their attending veterinarian, who has expertise in the care and treatment of the species being attended, and can prescribe the additional measures deemed necessary to satisfy the

nonhuman primates' psychological needs. We proposed to require that the attending veterinarian keep records of these additional instructions, and that they be subject to APHIS inspection under proposed § 3.81(c).

Several commenters recommended that we specify what additional enrichments would be required for these special categories of nonhuman primates. A large number of commenters recommended either that we delete the provisions regarding special categories of nonhuman primates, or delete the references to exercise and social interaction. Upon review of the comments, we continue to believe that the categories of nonhuman primates discussed above require special attention, and are revising our proposal to require such special attention, whether the animals are individually housed or not. We continue to believe that the form of special attention given these nonhuman primates would most appropriately be determined by the attending veterinarian. We are therefore proposing in revised § 3.81(c) that special attention be given to (1) infants and juveniles, (2) those nonhuman primates that show signs of being in psychological distress through behavior or appearance, and (3) those nonhuman primates used in research for which the Committee-approved protocol requires restricted activity. This special attention would be based on the needs of the individual species and in accordance with the instructions of the attending veterinarian. Some examples of special attention would be special feeding plans for juveniles, and increased one-on-one care for animals showing psychological distress.

In addition to these three special categories, we are proposing in this revised proposal that special attention be given to individually housed nonhuman primates that are unable to see and hear nonhuman primates of their own or compatible species. In certain cases, individual nonhuman primates might be prohibited from seeing and hearing other nonhuman primates by a Committee-approved research proposal. We believe that it is essential to the well-being of such nonhuman primates that they receive some form of compensatory enrichment. In our original proposal, under proposed § 3.80, we proposed to require that such nonhuman primates have positive physical contact or other interaction with their keeper or with another familiar and knowledgeable person for at least one hour each day. Upon review of the comments addressing this proposed provision, as discussed above

under the heading "Social grouping," we believe that safety considerations, and the need to employ the type of enrichments and interaction most appropriate to the individual animal, warrant basing the type of compensation to be provided on the professional discretion of the attending veterinarian. However, one example of special attention might be that an additional amount of manipulable objects would be provided to such animals.

Additionally, we are proposing that regulated facilities include in their environment enhancement plan special provisions for great apes weighing over 110 lbs. (50 kg). The regulations would require that these special provisions include additional opportunities to express species-typical behavior. The apparent social nature and high degree of intelligence of these animals requires that particular attention be given to their species-typical social and behavioral needs in the determination of enclosure size, location, and complexity, as the desirability of pair or group housing.

A number of commenters addressed the general issue of allowing the attending veterinarian the discretion to determine conditions that help promote the psychological well-being of nonhuman primates, or to recommend exemptions to the regulatory standards. These commenters stated that most veterinarians have inadequate training in primate behavioral biology and psychology to be able to make proper determinations regarding such conditions. We disagree with this assertion. Based on our experience enforcing the regulations, we believe that most attending veterinarians are well-versed in what is necessary for the animals' health and well-being. We are confident in such veterinarians' capabilities to make sound professional decisions with regard to the regulations.

Restraint devices. We are also proposing that the plan to be developed by the facility include provisions addressing restraint devices. In § 3.81(b) of our original proposal, we proposed to add a prohibition against confining nonhuman primates in chairs, unless required by an animal care and use procedure and approved by the Committee in accordance with Part 2 of the Animal Welfare regulations, and unless the animal is released daily for exercise for at least one continuous hour each day during the period of confinement unless continuous restraint in a chair is required by an animal care and use procedure and approved by the Committee. In cases where continuous restraint would be approved, we

proposed to require that the nonhuman primate be released for exercise for at least one hour before and one hour after the period of restraint.

A small number of commenters supported the proposed provisions regarding primate chairs as written. Several commenters opposed all use of primate chairs. We are not revising our proposed provisions based on these comments. Such restraining devices are used only in research, and we do not have the authority to interfere with approved research procedures. A small number of commenters recommended that the use of primate chairs for an extended period of time be prohibited or discouraged. Again, our authority does not extend to approved research procedures. A small number of commenters stated that the proposed exercise period for chaired nonhuman primates is insufficient; others recommended that it be required that chaired nonhuman primates receive social contact with a conspecific primate during the exercise period, and that all animals placed in chairs with the approval of the facility's Committee be inspected by the Committee prior to the Committee's granting approval for use of the chair. We are making no changes to our proposed provisions regarding primate chairs based on these comments. We believe that release for one continuous hour during the period of restraint is adequate to promote the animal's well-being, and we do not believe it is practical to require exercise with conspecific animals or to require Committee inspection of each animal proposed to be restrained. However, in order to clarify our intent with the regard of the proposed 1-hour release period, we are revising our proposal to provide that the nonhuman primates in question must be provided the opportunity for "unrestrained activity," rather than "exercise." We believe this revised wording more closely encompasses the intent of the proposed regulations.

A large number of commenters expressed concern that our proposed exercise requirements regarding nonhuman primates restrained in chairs would interfere with research by conflicting with the scientific reasons for the restraint. The recommendations submitted by the commenters included deletion of the provisions in question, allowing exercise of the animal any time on the same day of restraint, allowing short-term chair restraint without requiring the exercise requirements to be met, and allowing the amount of time spent in a chair and the associated exercise requirements to be left to the

judgment of the facility's Committee. Upon review of these comments, we agree that the proposed provisions, as written, could potentially interfere with approved research. Accordingly, we are proposing to revise our proposed provisions regarding the use of primate chairs to clarify that unrestrained activity be required during the restraint period only if such period of restraint is for more than 12 hours. In cases of short periods of restraint, the original proposal, as written, could potentially have required a longer period of unrestrained activity than the period of restraint. Additionally, we are removing our proposed requirement that, in cases where continuous restraint is approved by the committee, the animal be released for exercise at least one hour before it is restrained and for at least one hour after the period of restraint. We believe that such a provision is necessary, because, even without such a specific requirement, the nonhuman primate would have an opportunity to pursue its normal activity before and after the period of restraint.

A small number of commenters recommended that the Committee be allowed professional judgment in deciding which animals should be placed in restraining chairs, and which animals should be exempted from exercise for research reasons. The regulations as written already include such provisions and we are making no changes to our proposal based on these comments.

In this revised proposal, we are proposing several additional changes to our proposal regarding primate chairs. First, in this revised proposal we refer to restraint devices rather than primate chairs. Although primate chairs are the form of restraint devices most commonly used, we believe it is inappropriate to limit the provisions of our regulations specifically to devices known as primate chairs. Second, we are also proposing that nonhuman primates may be placed in restraint devices if required for health reasons as determined by the attending veterinarian. Finally, we are providing in this revised proposal that maintenance in such restraint must be for the shortest period possible.

Documentation. In § 3.81(c) of our proposal, we proposed that documentation of the release of each nonhuman primate for exercise and social interaction, and of the additional environmental enrichments ordered under proposed paragraph (a)(4) be kept by the attending veterinarian, subject to inspection by APHIS inspectors, and in the case of Federal research facilities, to

review by officials of any Federal funding agency. We are not including similar provisions in this revised proposal. The plan required to be developed and documented by the facility, discussed above, would address the means the facility would use to comply with the regulations.

Exemptions. We stated in the supplementary information of our proposal that we recognize that certain situations will require an immediate response from facility personnel, when it is necessary to provide less than the minimum standards to a nonhuman primate, due to the condition of the animal, in order to provide for its welfare. We therefore proposed to include a provision in proposed § 3.81 that would authorize attending veterinarians to exempt or restrict a particular nonhuman primate from its required exercise and social release period if he or she determines that it is necessary for the nonhuman primate's health, condition, or psychological well-being due to the physical or psychological condition of the animal. As proposed, the exemption would be for a period of up to 30 days, would be required to be recorded by the attending veterinarian, and would be subject to APHIS review and, in the case of Federal research facilities, to review by officials of any Federal funding agency. We proposed to require that the research facility be responsible for having the attending veterinarian review the grant of exemption at least every 30 days to determine if it were still warranted under the circumstances. Under our proposal, exemptions would be required to be included in the research facility's annual report and in the Committee's inspection report under § 2.35(b)(2)(i)(C).

In this revised proposal, we are proposing provisions similar to those in our original proposal, with certain additions and modifications we discuss below. In responding to our original proposal, several commenters recommended specific categories of nonhuman primates that should be exempted from exercise. We believe that the provisions as written provide the attending veterinarian sufficient latitude to decide which nonhuman primates should be exempted, and are not amending our proposal in response to these recommendations. A large number of commenters stated that the proposed provisions regarding exemptions were unreasonable, would require excessive paperwork, and would subject the attending veterinarian's opinion to unqualified review. Many commenters expressed concern that if

the exemptions were included in the facility's annual report, and that report were subject to the Freedom of Information Act, information on individual animals would become public knowledge.

The requirement that a summary of exceptions be included with the Annual Report is in accordance with § 2.36(a)(3) of the regulations and is not particular to the provisions in proposed § 3.81. Because such requirement is included elsewhere, however, we are removing it from proposed § 3.81.

Accordingly, § 3.81(e) of this revised proposal would provide that the attending veterinarian may exempt individual nonhuman primates from participation in environment enhancement plans because of their health or condition, or in consideration of their well-being, and must document the basis of such exemptions for each nonhuman primate. Unless the basis for an exemption is a permanent condition, it would be required that the attending veterinarian review the exemption at least every 30 days.

A number of commenters recommended that provision should be made for exemption on valid scientific grounds. Such exemptions are already provided for under § 2.38(k)(1) of the regulations. However, in order to emphasize that the standards of this revised proposal shall not interfere with approved research, we are proposing to add language in § 3.81(e)(2) of this revised proposal that the research facility's Committee may exempt individual nonhuman primates from some or all of the environment enhancement plans, for scientific reasons set forth in the research proposal. We would require that the basis of such exemption be documented in the approved proposal and be reviewed at appropriate intervals as determined by the Committee, but not less than annually.

We would additionally require that records of any exemptions be maintained by the dealer, exhibitor, or research facility and be made available to USDA officials or officials of any pertinent funding Federal agency upon request.

Feeding—Section 3.82

In § 3.82 of our proposal, we proposed to revise the provisions of current § 3.79 "Feeding," to include means of enhancing the psychological well-being of nonhuman primates by varying the types of feed and the methods of feeding, such as by using task-oriented feeding or allowing the animals to forage for food as in nature. We stated in the **SUPPLEMENTARY INFORMATION** of

our proposal that we considered variation in the nonhuman primates' feeding on a daily basis a necessary means of providing necessary mental and physical stimulation.

We proposed minor changes to current § 3.79 to require that the amount of food, type of food, and frequency of feeding be appropriate for the species, size, age, and condition of the nonhuman primate, and be in accordance with generally accepted professional and husbandry practices and nutritional standards. As we discussed in the supplementary information of our proposal, in accordance with those practices and standards, consideration would also be given to the conditions under which the animal is kept, such as whether it is maintained in a primary enclosure allowing it frequent vigorous activity or if it is maintained in a primary enclosure that is more limiting, and whether it is maintained outdoors in a cold environment or in a warm environment, since these variables may affect the amount of food that is appropriate for the animal.

Many commenters supported our proposed requirement for a varied diet for nonhuman primates, and for varying feeding methods. Several commenters recommended that the regulations require that a varied diet consist of at least three different feed types at each feeding. A large number of other commenters opposed the proposed requirements for a varied diet, stating that varying the diet and method of feeding would interfere with research studies, that the requirements ignored the typical feeding behavioral patterns of varying species, and that the daily variation of diet would be stressful to nonhuman primates. Some commenters expressed concern that varying the nonhuman primates' diet could result in malnutrition or anorexia, and recommended either that the regulations require that the diet only be supplemented with varied food items or that varying the diet be conditional upon the advice of the attending veterinarian. A number of commenters stated that because commercial chow is nutritionally balanced, a varied diet was unnecessary.

We disagree that variety in the diet and method of feeding of nonhuman primates will interfere with research studies. As set forth in part 2 of the regulations, exceptions of the standards in part 3 may be made for research facilities when such exceptions are specified and justified in the proposal to conduct a specific activity and are approved by the facility's Committee. We do agree, however, that whether a

particular animal or species of nonhuman primates would benefit from a varied diet is a decision that can best be made by the attending veterinarian. Therefore, in this revised proposal we are removing the requirement in proposed § 3.82(a) that a nonhuman primate's diet consist of varied food items, and are instead including "varied food items" in proposed § 3.81(b) as an example of an environmental enrichment. For like reasons, we are removing the requirement in proposed § 3.82(b) that the method of feeding be varied daily, and are instead including "using foraging or other task-oriented feeding methods" in proposed § 3.81(b) as an example of an environmental enrichment. We are also making minor wording changes to proposed § 3.82(a) for purposes of clarity, and are redesignating paragraphs (c), (d), and (e) in proposed § 3.82 as paragraphs (b), (c), and (d), respectively.

We also proposed in § 3.82(a) that the food must be clean, wholesome, and palatable. A small number of commenters stated that, in group housing, there is no way to ensure that food will remain clean, uncontaminated, wholesome, and palatable. We are making no changes to our proposal based on these comments. While we agree that the food may not always remain clean after it is offered to the nonhuman primates, it is possible and necessary to make sure that the food is in appropriate condition at the time it is offered.

We proposed in § 3.82(c) that nonhuman primates must be fed at least once each day, except as otherwise might be required to provide adequate veterinary care, with infants and juveniles required to be fed as often as necessary in accordance with generally accepted professional and husbandry practices and nutritional standards. Several commenters specifically supported these provisions as written. A large number of commenters stated that it could not be guaranteed that animals would eat their food when offered or would eat daily. Many commenters recommended that the nonhuman primates be offered food as often as necessary, in accordance with generally accepted professional and husbandry practices and nutritional standards based on the animals' age and condition. We are making no changes based on these comments. We continue to believe, based on the evidence available to us and on our experience enforcing the regulations, that daily feeding is necessary for the health and well-being of nonhuman primates. While we acknowledge that there is no way to

force an animal to consume the food offered to it, we believe that proper husbandry practices require that the animals at least be offered food each day.

We proposed to require in proposed § 3.82(d) that multiple feeding sites be made available if members of dominant nonhuman primate or other species are fed together with other nonhuman primates and proposed to require observation of the feeding practices of the animals to determine that each receives a sufficient amount of food. We stated in the proposal our belief that this would also enhance the psychological well-being of nonhuman primates by ensuring that each would have access to food and would not be prevented from obtaining food due to the aggressive behavior of others.

Several commenters specifically supported proposed § 3.82(d) as written. A large number of commenters opposed the provisions regarding multiple feeding sites and observation, stating that, due to dominance behavior, multiple feeding sites would not ensure that all animals will get food. The commenters also stated that, because animals eat according to dominance order, observation would require that each social group be observed for several unlimited hours.

We are making no changes to our proposal based on these comments. We disagree that multiple feeding sites would not be effective in ensuring feeding of all nonhuman primates, provided an adequate number of feeding sites are present. Further, while we acknowledge that close observation of feeding practices may require some time at first, the process will be less time consuming once feeding patterns are established in a group.

We proposed to continue to require sanitization of food containers at least once every two weeks and also proposed to require that food containers be sanitized whenever used provide food to a different nonhuman primate or social grouping of nonhuman primates. We specified that approved methods of sanitization would be those methods provided in proposed § 3.84(b) for sanitization of primary enclosures.

Watering—Section 3.83

In proposed § 3.83, we proposed minor changes to current § 3.80 to require that sufficient potable water be provided to the nonhuman primates. We proposed to retain the requirement that if water is not available to the nonhuman primates at all times, it must be offered to them at least twice a day, and we proposed to add a requirement that the water be offered for at least one hour each time it

is offered. Under our proposal, the attending veterinarian could vary these requirements whenever necessary to provide adequate veterinary care to the nonhuman primates. We proposed to continue to require sanitization of water containers at least once every two weeks and also to require sanitization when used to provide water to a different nonhuman primate or social grouping of nonhuman primates. We specified that approved methods of sanitization would be those methods provided in proposed § 3.84(b)(3) for sanitization of primary enclosures.

One commenter specifically supported proposed § 3.83 as written. Some commenters recommended that we require that potable water be provided continuously under all circumstances or in times of excessive heat, or that water be provided at least four times daily for a minimum of 1 hour each time. A greater number of commenters stated that the proposed requirements regarding how often nonhuman primates must be offered water were too rigid, and that a schedule for watering should be established according to professional discretion. Based on our experience enforcing the regulations, we believe that two 1-hour periods of watering is sufficient to meet the needs of nonhuman primates. However, we consider that amount of watering a minimum standard that should in no situation be lessened. Therefore, in this revised proposal, we are making no substantive changes to proposed § 3.83. However, we are making several nonsubstantive changes to proposed § 3.83 for purposes of clarity.

Cleaning, Sanitization, Housekeeping, and Pest control—Section 3.84

In proposed § 3.84 we proposed requirements similar to those in current § 3.81 concerning cleaning, sanitization, housekeeping, and pest control, in order to provide for the welfare and well-being of nonhuman primates. In our proposed revisions to current § 3.81, we included the requirement that excreta and food waste be removed from and from underneath primary enclosures at least daily and as often as necessary, rather than merely "as often as necessary" as in the current regulations. We also proposed to require that the animals be removed from a primary enclosure when a cleaning method using water is performed, so that they will not be involuntarily wetted or injured. We proposed to require that fixtures inside of primary enclosures, such as bars and shelves, must be kept clean and be replaced when worn. In addition to requiring sanitization of planted areas inside of primary enclosures and gravel,

sand, and dirt surfaces by removing contaminated material, we proposed to require that such areas be raked and spot cleaned daily. We proposed to require that if the nonhuman primates engage in scent marking, the primary enclosures be spot cleaned daily and sanitized at regular intervals established in accordance with generally accepted professional and husbandry practices, so as not to cause those animals psychological distress. Among the provisions in current § 3.81 was the requirement that a used primary enclosure be sanitized before it can be used to house another nonhuman primate.

We proposed such additional requirements in order to enhance the physical environment in which nonhuman primates are maintained through cleanliness and to provide for their general welfare. We also proposed nonsubstantive changes to current paragraphs (a) through (d) for purposes of clarity, in order to make the regulations easier to understand and comply with.

A number of commenters supported the proposed provisions as written. A large number of commenters opposed the proposed provision that the animals be removed from the primary enclosure when a method of cleaning using water is employed. The commenters stated that certain caging designs protect the animals from being involuntarily wetted when cleaning is carried out, and that removing the animals when water is used is impractical and unnecessary. Upon review of the comments regarding this issue, we believe that in some cases the practical and safety problems associated with removing nonhuman primates from cages, as well as the potential stress on the animals, would outweigh the potential benefits of removing the animals when cleaning using water is carried out. We are therefore revising our proposal at proposed § 3.84(a) to require that when using water to clean a primary enclosure, whether by hosing, flushing, or other method, a stream of water must not be directed at a nonhuman primate. The regulations in this revised proposal would also require that when steam is used to clean the primary enclosure, nonhuman primates be removed from their primary enclosure or be adequately protected to prevent them from being injured.

A number of commenters stated that a daily disturbance for cleaning would harm the psychological well-being of the nonhuman primates. We disagree that the simple daily removal of excreta and food waste would be unreasonably

stressful to nonhuman primates, and believe it is necessary for the physical well-being of the animals. We agree, however, that full daily cleaning of the primary enclosures could be unnecessary, provided the facility meets the other cleaning and sanitization requirements of proposed § 3.84. We are therefore not including in this revised proposal the requirement that appeared in our original proposal that hard surfaces of primary enclosures be cleaned every day. However, we are providing in this revised proposal that, in cases where the species of nonhuman primates housed engage in scent marking, hard surfaces in the primary enclosure would have to be spot-cleaned daily.

A large number of commenters recommended that we remove the proposed requirement that excreta and food waste be removed from primary enclosures and the areas underneath them more often than daily if necessary. We agree with the commenters that it is unlikely that such removal would be necessary more often than daily. In this revised proposal we would require that excreta and food waste be removed from inside each indoor primary enclosure daily, and from underneath the enclosure as often as necessary to prevent an excessive accumulation of feces and food waste, to prevent the nonhuman primates from being soiled, and to reduce disease hazards, insects, pests, and odors. We would limit this requirement to indoor primary enclosures, because our experience enforcing the regulations has demonstrated that in outdoor facilities, some of which encompass a number of acres, nonhuman primates can avoid contact with excreta and food waste, even if the enclosure is not always cleaned daily. We are proposing to require, however, that dirt floors, floors with absorbent bedding, and planted areas in primary enclosures be spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta or as often as necessary to reduce disease hazards, insects, pests, and odors. For the same reasons, we are proposing that only indoor primary enclosures be sanitized once every two weeks.

Many commenters, addressing our proposed requirement that used primary enclosures be sanitized before being used to house another nonhuman primate, stated that large outdoor natural primate habitats cannot be sanitized when animal groups are changed. We are making no changes to our proposal based on these comments. In our proposal, we specified that

primary enclosures that could not be sanitized using traditional means, must be sanitized by removing contaminated material as necessary to prevent odors, diseases, pests, insects, and vermin infestation. We believe that such a requirement is reasonable, practicable, and necessary. Further, based on our experience enforcing the regulations, we do not anticipate that, in the types of enclosures referred to by the commenters, entire groups of animals are changed so frequently as to make the proposed regulation unnecessarily burdensome.

In this revised proposal, we are adding clarifying language to make clear that used primary enclosures must be sanitized before being used to house either another nonhuman primate or group of nonhuman primates.

Many commenters recommended that we define the word "clean." We believe that the dictionary definition of the word "clean" adequately conveys our intent and are making no change to our proposal based on these comments. We also believe that the changes we have made to our revised proposal in response to other comments will address the areas the commenters may have found confusing.

Many commenters recommended that the proposed regulations allow an alternate sanitization schedule, so that a scent-marked surface remains at all times. We are making no changes to our proposal based on these comments. We believe that the sanitization provisions in proposed § 3.84(b)(2) make adequate allowance for scent marking. Many of the same commenters recommended that we amend the wording in proposed § 3.84(b) to clarify the difference between cleaning and sanitization. We believe that the provisions are clear as written and are making no changes to our proposed rule based on these comments.

In proposed § 3.84(b)(3), we included specific acceptable means of sanitization. These methods are the same as those in the current regulations. Many commenters stated that these provisions are overly specific and restrictive. Based on our experience enforcing the regulations, we have found that requiring the methods of sanitization listed has resulted in effective sanitization. However, we recognize that new products with the same effectiveness as those listed may be or may become available. We are therefore revising our proposal to allow the use of detergent/disinfectant products that accomplish the same purpose as the detergent/disinfectant

procedures specified in our original proposal.

Employees—Section 3.85

Current § 3.82 requires that there be a sufficient number of employees to maintain the prescribed level of husbandry practices required by subpart D and the rendering of husbandry practices be under the supervision of an animal caretaker with a background in animal husbandry or care. We proposed minor revisions to this section in proposed § 3.85 to make clear that this requirement would be imposed upon every person subject to the Animal Welfare regulations, and that the burden of making certain that the supervisor is appropriately qualified would be on the employer regulated under the Act. We did not propose to prescribe a specific number of employees for each facility, because the number of employees needed will vary according to the size and configuration of the facility, and according to the number and type of animals housed there. We proposed to require that a facility have enough employees to carry out proper feeding, cleaning, observation, and other generally accepted professional and husbandry practices.

A number of commenters objected to proposed § 3.85, stating that inspectors and government administrators are not qualified to tell facilities that they do not have enough employees. We are making no changes based on these comments. As we stated above, whether a facility has enough employees would be determined on a case-by-case basis. We believe that such a determination can be made based on an evaluation of common practices regarding facilities of a particular size or nature, and on simple observation of whether the regulations are being complied with.

A small number of commenters suggested either that employee evaluation standards need further clarification, or that the regulations should require that the supervisor be sympathetic toward the well-being of nonhuman primates. We are making no changes based on these comments. We believe the standards proposed can be applied to all facilities adequately, and would not benefit from further specificity. We do not believe that it is either enforceable or necessary to determine the emotional attitude of employees, as long as they perform according to the regulatory standards.

Many commenters expressed concern that the proposed regulations would increase the risk to employees. While the intent of the comment is not clear to us, we believe that any risk to

employees would be decreased by these proposed provisions, by emphasizing the need for knowledge, background, and experience in proper husbandry and care of nonhuman primates.

In this revised proposal, we are making a minor change to remove the requirement that the supervisor be an animal caretaker. However, under this revised proposal, the supervisor would still have to meet the other qualifications set forth in our original proposal.

Social Grouping and Separation— Section 3.86

In proposed § 3.86, we proposed to revise current § 3.83 concerning social grouping of nonhuman primates in primary enclosures in order to promote their psychological well-being. The current regulations provide that when nonhuman primates are housed together they must be maintained in compatible groups and must not be housed in the same enclosure with animal species other than nonhuman primates. We proposed to allow nonhuman primates to be housed with other nonhuman primate species and with other animal species as long as they are compatible, do not compete with the other species for food and shelter, and would not be hazardous in any way to the health and well-being of each other.

We proposed to add the following regulations requiring separation of nonhuman primates in the following circumstances: (1) Nonhuman primates exhibiting vicious or overly aggressive behavior must be housed separately, and (2) nonhuman primates under quarantine or treatment for a communicable disease must be housed separately. We stated in our proposal that we consider the requirements to house nonhuman primates separately under these limited circumstances necessary to allow nonhuman primates to peacefully coexist in primary enclosures, as is required for their psychological well-being, and to protect their physical health and welfare.

We included provisions in our proposed regulations for keeping families together and for keeping compatible groups constant. We stated that studies of nonhuman primates have shown that they are socialized in a family-oriented manner in nature and that varying a group's composition may lead to distress or aggressive behavior towards new members of the group. Accordingly, we stated our belief that these regulations are necessary to promote the psychological well-being of nonhuman primates.

As discussed in this supplementary information under the heading "Social

grouping," we believe that the issue of social grouping can best be addressed in the context of the overall well-being of nonhuman primates. Accordingly, we are removing proposed § 3.86 from our revised proposal, and are proposing to address the issue of social grouping in proposed § 3.81, regarding psychological well-being. Accordingly, we are revising our proposal to redesignate section numbers where appropriate. Sections that appeared as §§ 3.87 through 3.93 in our original proposal now appear as §§ 3.86 through 3.92 in this revised proposal.

A small number of commenters specifically supported proposed § 3.86 as written. Several commenters recommended that the regulations require that an attempt be made to resocialize vicious or overly aggressive nonhuman primates. We do not believe it would be practical to include such a provision in the regulations and are making no changes to our proposal based on these comments. A number of commenters suggested that proposed § 3.86 was unclear as written. We believe that the provisions regarding social grouping, as now contained in proposed § 3.81 are clear and understandable.

A large number of commenters opposed the requirement in proposed § 3.86(b) that families must be housed together and compatible groups must remain constant. The commenters stated that such a requirement could be detrimental to animals, and asserted that families do not stay together in the wild. The commenters stated that literature documents male and female transfers between groups. The commenters further stated that it is impossible to maintain compatible groups in research facilities where animals are removed for research purposes or to accommodate changing populations. While we believe that in most cases research data indicates beneficial effects from maintenance of families or other compatible groups, upon review of the comments received we acknowledge that such grouping may not be practical or beneficial to nonhuman primates in all cases. We are therefore not including in this revised proposal the requirements that families be housed together and that compatible groups remain constant.

Transportation Standards

In preparing our proposal to amend the transportation standards we consulted the "Interagency Primate Steering Committee Guidelines" developed by the United States National Institutes of Health-sponsored Interagency Primate Steering

Committee. The Interagency Primate Steering Committee is composed of an inter-agency group of scientists concerned with the care and handling of nonhuman primates. The introduction to the Guidelines states the following:

Shipment of nonhuman primates by a carrier from one location to another is stressful, even under the best of conditions. The purpose of these guidelines is to minimize the effects of transportation stress on these animals and to have them arrive at their destination in as good a physical condition as possible, with a minimal degree of illness or mortality. Secondly, the guidelines are intended to serve as a reference for adequate care of nonhuman primates for all persons involved with the shipping of these animals.

We also considered the transportation standards proposed by the U.S. Department of the Interior, Fish and Wildlife Service (USFWS) for nonhuman primates imported from abroad.

Based upon our experience enforcing the current regulations, and our consideration of the information available to us, we proposed revisions to the transportation standards in order to safeguard the health, safety, and psychological well-being of nonhuman primates transported in commerce.

As part of our revision, we proposed to include requirements that were previously part of the Animal Welfare regulations but were inadvertently omitted from the 1977 revision of the regulations. When the transportation standards were rewritten in 1977 to incorporate the 1976 amendments to the Act concerning the commercial transportation of animals, the existing standards for surface transportation were not included in the regulations. Since that time, the standards have pertained to the commercial transportation by common carrier and only a few paragraphs have pertained to surface transportation by private vehicle. The regulations we proposed to reinstate specifically affect provisions concerning ambient temperature during surface transportation in order to effect improved traveling conditions for nonhuman primates. As proposed, they also impose similar requirements on all persons subject to the Animal Welfare regulations engaged in the transportation of nonhuman primates in order to afford the animals necessary protection whenever they are transported in commerce.

A number of commenters expressed concern that the proposed regulations regarding transportation standards would significantly increase animal transit time. Some commenters estimated that the proposed regulations

would quadruple transit charges. Others stated that the proposed regulations would eliminate the transport of animals by air. However, the commenters did not supply data to support this assertion. The purpose of amending the regulations is to help ensure the well-being of nonhuman primates. In the absence of data indicating that other factors should override specific measures proposed to achieve this goal, we are making no changes to our proposal based on these comments.

Consignments to Carriers and Intermediate Handlers for Transportation—Section 3.87 (Revised as Section 3.86)

In proposed § 3.87, which has been changed to § 3.86 in this revised proposal, we proposed to expand the current obligations imposed upon carriers and intermediate handlers (defined in part 1 of the regulations), to ensure the well-being of nonhuman primates during transport in commerce. Our proposal required that certain prerequisites be satisfied before carriers and intermediate handlers could accept nonhuman primates for transport in commerce. Additionally, the proposed regulations included certain duties of the carriers and intermediate handlers following arrival of the shipment at its destination. Various obligations are presently contained in current §§ 3.85 and 3.88. We proposed to consolidate them in one section, proposed § 3.87, and to add some additional ones that we considered necessary for the nonhuman primates' welfare.

In sum, the requirements imposed on carriers and intermediate handlers in current § 3.85 and in our proposed revision are as follows: (1) Current § 3.85(a) requires that carriers and intermediate handlers not accept a live nonhuman primate for shipment from any person subject to the regulations more than 4 hours before the scheduled departure time of the primary conveyance in which the animal will be shipped, except that this time may be extended by agreement to 6 hours if specific prior scheduling of the shipment has been made. One commenter opposed the provision in § 3.87(a) of our proposal regarding extending the time before departure to 6 hours. We have observed no problems regarding the well-being of nonhuman primates because of this existing provision and are therefore making no revisions to our proposal based on this comment. (2) § 3.85(b) requires that carriers or intermediate handlers accept a nonhuman primate for shipment only if it is in a primary enclosed meeting the requirements of current § 3.85 "Primary

enclosure used to transport live nonhuman primates," except that they may accept a nonhuman primate if it is consigned by a person subject to the regulations who provides a certificate stating that the primary enclosure conforms with § 3.85, unless the enclosure is obviously defective. The information required to be in the certificate is stated in the regulations. These provisions, which we included in § 3.87(e) of the proposed rule, were considered by many commenters to be unnecessarily word and redundant, or to put too much responsibility on the transporter. We disagree. The intent behind allowing certification that a primary enclosure meets the standards is to relieve the carrier or intermediate handler of the need to assess the performance capabilities of the primary enclosure where such assessment would be difficult or impractical. It does not relieve the carrier or intermediate handler of the responsibility to refuse acceptance of a primary enclosure that is obviously defective or damaged.

Current § 3.85(c) states that carriers and intermediate handlers whose facilities do not meet the minimum temperature requirements provided in the regulations may accept a nonhuman primate for transport if the consignor furnishes a certificate executed by a veterinarian accredited by USDA within 10 days before delivery of the animal for transport stating that the nonhuman primate is acclimated to air temperature lower than those prescribed in current §§ 3.90 and 3.91. The information required to be in the certificate is likewise stated in the regulation. Current § 3.85(d) requires carriers and intermediate handlers to notify the consignee of the animal's arrival at least once every 6 hours following arrival of the nonhuman primate at the animal holding area of a terminal facility and to record the time, date, and method of attempted and final notification on the shipping document.

Current § 3.88 requires the following: (1) Section 3.88(a) requires that nonhuman primates be offered potable water within the four hours preceding transport in commerce. Dealers, exhibitors, and research facilities are required to provide water to nonhuman primates transported in their own primary conveyance at least every 12 hours after transportation is begun and carriers and intermediate handlers are required to do so at least every 12 hours after they accept the animal for transport. (2) Section 3.88(b) provides requirements concerning the frequency of feeding nonhuman primates and similarly distinguished between those

persons transporting nonhuman primates in their own primary conveyances, and carriers and intermediate handlers. (3) Section 3.88(c) requires any dealers, research facility, exhibitor, or operator of an auction sale consigning nonhuman primates for transport to affix written instructions concerning the animals' food and water requirements on the outside of the primary enclosure used for transporting the nonhuman primate. (4) Section 3.88(d) states that no carrier or intermediate handlers shall accept a nonhuman primate for transport in commerce unless written instructions concerning food and water requirements are affixed to the outside of its primary enclosure.

We proposed to place the various prerequisites that must be satisfied before carriers and intermediate handlers can accept a nonhuman primate for transport in commerce in proposed § 3.87, and to add some additional ones necessary for the nonhuman primates' well-being. We also proposed nonsubstantive changes to current § 3.85(a) in proposed § 3.87(a).

In proposed § 3.87(c), we proposed to include the requirements of current § 3.88(d) by requiring that written instructions concerning the food and water requirements for each nonhuman primate in the shipment be securely attached to the outside of the primary enclosure before a carrier or intermediate handler may accept it for transport.

As stated above, current § 3.88(a) provides that nonhuman primates must be provided water at least every 12 hours after acceptance by carriers and intermediate handlers for transportation. Current § 3.88(b) provides that nonhuman primates more than 1 year of age be offered food at least once every 24 hours after acceptance by carriers and intermediate handlers for transportation and that nonhuman primates less than 1 year of age be offered food at least once every 12 hours after acceptance for transportation. It is conceivable under these regulations that a nonhuman primate would have been fed up to 24 hours before being consigned for transportation in commerce and would then not be offered food for another 24-hour period. To avoid this occurrence, and to be sure that nonhuman primates are given water as often as required for their well-being, we proposed to add a certification requirement in proposed § 3.87(d) that would state that each nonhuman primate in a primary enclosure delivered for transport was last offered food during the 12 hours

before delivery to a carrier or intermediate handler and was last offered water during the 4 hours before delivery to a carrier or intermediate handler. As proposed, it would also have to include the date and time each nonhuman primate in the primary enclosure was last offered food and water. We proposed that carriers and intermediate handlers that the nonhuman primates were provided water within that 4 hours before not be allowed to accept nonhuman primates for transport unless this certification accompanies the animal, is signed and dated by the consignor, and includes the date and time it was executed. We proposed that this certification, as well as the others required in proposed § 3.87, would also have to specify the species of nonhuman primate contained in the primary enclosure. Several commenters opposed the requirement for certification of the time of last feeding and watering. We continue to believe that such certification is necessary for effective implementation of the regulations and are making no changes to the proposal based on these comments.

In addition, in accordance with proposed § 3.90, "Food and water requirements," which has been changed to § 3.89 in this revised proposal, we proposed that the time periods applicable to carriers and intermediate handlers for feeding and watering the nonhuman primates would begin with the time the animal was last offered food and water, in accordance with the certification. As we discussed in the supplementary information of our proposal, we believe that the proposed requirement that the consignor certify delivery to the carrier or intermediate handler, and were offered food within 12 hours before delivery to the carrier or intermediate handler accepting the animals, would avoid situations where the carrier or intermediate handler would have to provide food and water immediately upon acceptance. We proposed to add these requirements so that carriers and intermediate handlers would be better able to provide any needed care and so that the nonhuman primates being transported would not go more than 12 hours without water or 24 hours without being offered food, if 1 year of age or more, and would not go more than 12 hours without being offered food, if less than 1 year of age.

In our proposal, we proposed to clarify the certifications required from the consignor regarding conformance of the primary enclosure with the regulations in Subpart D, and acclimation of nonhuman primate to

temperatures lower than those prescribed in the regulations. We proposed to require that the certification of acclimation be signed by a veterinarian, that it specify a minimum temperature that the nonhuman primate can safely be exposed to, and that it specify each of the animals contained in the primary enclosure to which the certification is attached, rather than referring to the shipment of animals as a whole. We included the contents of the certifications in paragraphs (e) and (f) of proposed § 3.87, respectively. We proposed to clarify current § 3.85(c) by requiring that the temperatures to which a nonhuman primate is exposed must not be lower than the minimum temperature specified by the veterinarian and must be reasonably accepted range for the nonhuman primate as determined by the veterinarian, considering its age, condition, and species of the animal, even if it is acclimated to temperatures lower than those prescribed in the regulations. A small number of commenters addressed this last provision. Several expressed concern that allowing the veterinarian to specify a minimum temperature would be difficult to implement without major modifications of the entire airline tracking system for cargo. The remainder of the commenters recommended that the regulations require assurance that the ambient temperature will be above the minimum temperature specified in the veterinary certificate of acclimation under all circumstances. We are making no changes to our proposal based on these comments. In enforcing the regulations, we expect conformance within all practical limits. Our responsibility and concern is to ensure that overall well-being of the animals transported. We believe that the provisions regarding minimum temperature are workable as written, and do not believe it would serve any practical benefit to amend them.

We proposed to add limitations on how long a nonhuman primate can be held at a terminal facility while waiting to be picked up by the consignee. We proposed to adopt the time limitations provided in part 2, § 2.80, "C.O.D. shipments". Accordingly, we proposed that the consignor must attempt to notify the consignee upon arrival, and at least once every 6 hours for 24 hours after arrival, and then must return the animal to the consignor or to whomever the consignor designates if the consignee cannot be notified. Under our proposal, if the consignee is notified and does not

take physical delivery of the nonhuman primate within 48 hours of its arrival, the carrier or intermediate handler must likewise return the animal to the consignor or to whomever the consignor designates.

We proposed to revise current § 3.85(d) to specifically require that carriers and intermediate handlers continue to maintain nonhuman primates in accordance with generally accepted professional and husbandry practices as long as the animals are in their custody and control and until the animals are delivered to the consignee or returned to the consignor or to whomever the consignor designates. We proposed to require the carrier or intermediate handler to obligate the consignor to reimburse it for the expenses incurred by the carrier or intermediate handler in returning the animal. These requirements appeared in proposed § 3.87(g). No commenters addressed these provisions and we are making no changes to them in this revised proposal.

Primary Enclosures Used to Transport Nonhuman Primates—§ 3.88 (revised as Section 3.87)

We proposed to reorganize the provisions of current § 3.86 and to make nonsubstantive changes to this section for clarity. These provisions appeared in § 3.86 of our proposal, which has been changed to § 3.87 in this revised proposal. One of the provisions in the current regulations, which appeared in § 3.86(a)(4) of the proposal, is that primary enclosures be constructed so as to allow easy removal of any animals in the event of an emergency. A small number of commenters opposed this provision; one commenter recommended that we issue standards for the removal of animals from enclosures. Although we believe that provision for the safe and quick removal of transported animals is necessary for their well-being, the "emergency" nature of such removals does not lend itself to specific standards. Therefore, we are making no changes to the proposal based on these comments. In addition to adopting the provisions of current § 3.86, our original proposal contained the following additional substantive changes to the current regulations.

We proposed to revise completely the current regulations concerning the number of nonhuman primates that can be transported together in one primary enclosure. The current regulations allow up to ten nonhuman primates to be transported in one primary enclosure. The guidelines issued by the Interagency Primate Steering Committee for the

transportation of nonhuman primates state that, as a general principle, nonhuman primates should be transported in individual compartments to avoid transmission of disease except when necessary to minimize social stress. In our proposal, we stated that, based upon our experience in regulating the transportation of nonhuman primates and upon consideration of the information available, we have determined that placing this number of nonhuman primates together in a situation that is unusual to and therefore stressful to the animals is dangerous for the animals and to the humans handling them. We therefore proposed in § 3.88(d)(1) that each nonhuman primate be transported individually in separate primary enclosures that may be connecting, except that the following social groupings could be maintained during transportation: (1) A mother with her nursing infant, (2) an established male-female couple (unless the female is in estrus) or a family group, and (3) a pair of juveniles that have not reached puberty.

A number of commenters recommended that the regulations require that if a pair of juveniles are transported together, they be compatible. We believe such a clarification is appropriate and have added it to this revised proposal. Several commenters stated that we should extend these exceptions to allow any nonhuman primates that are compatible to be transported in the same primary enclosure. While we believe that combining two compatible juveniles in one enclosure would pose minimal risk to the nonhuman primates, we believe that combining two adult nonhuman primates, other than a male-female couple, would pose unacceptable risks. Based on our experience enforcing the regulations, we have determined that the stresses of transportation can cause two otherwise compatible nonhuman primates to become aggressive and dangerous to each other. We are therefore making no changes to our proposal based on these comments.

In § 3.88(d)(2) of our proposal, we proposed that nonhuman primates of different species must not be transported in adjacent or connecting primary enclosures. Several commenters recommended that we allow nonhuman primates of different species to be transported in adjacent enclosures. We believe that the potential stress to the nonhuman primates of being in such close proximity with nonhuman primates of other species requires such a restriction, and we are therefore making

no changes to our proposal based on these comments.

We proposed to completely revise the requirements for ventilation openings for primary enclosures that are not permanently affixed to the primary conveyance to provide substantially greater ventilation openings for the nonhuman primates' comfort during travel. A large number of commenters opposed our proposed changes to the amount of wall surface that must be comprised of ventilation openings. The commenters stated that the proposed increases in ventilation openings were undesirable because they would expose the animals to more stress from the outside environment, they would reduce the animals' protection from cold temperatures and drafts, and they would weaken shipping containers. Based on the evidence provided in these comments, we believe that the well-being of nonhuman primates that are transported would be best served by retaining the current regulations regarding the percentage of wall space that must be comprised of ventilation openings, and are proposing to do so in this revised proposal. We are, however, including a provision in this revised proposal that differs from the current regulations. The current regulations require that at least one-third of the total minimum area required for the ventilation of primary enclosures used for transportation be located on the lower one-half of the primary enclosure and, likewise, at least one-third be located in the upper one-half. In this revised proposal, we are including provisions to require that all of the ventilation openings be located on the upper one-half of the primary enclosure. Research conducted by the Federal Aviation Administration indicates that it is not necessary for the animals' well-being that one-third of the openings be located on the lower one-half of the enclosure. To the contrary, research has shown that openings on lower one-half of the enclosure are in many instances detrimental to the nonhuman primates being transported. Timid animals such as nonhuman primates benefit from the security provided by a solid wall in the lower one-half of the enclosure, and can be caused stress by openings on the lower one-half.

In our proposal, we proposed an additional construction requirement that would allow the floor of a primary enclosure to be wire mesh or slatted but that would require it to be designed and constructed so that the nonhuman primate contained inside cannot put any part of its body between the slats or through the mesh in order to prevent

injury to the nonhuman primates. Also, we proposed to require that primary enclosures be constructed of materials that are nontoxic to the animal and that would not otherwise harm their health or well-being.

In proposed § 3.88(f), we proposed additional marking requirements for the outside of primary enclosures to better ensure their careful handling, so as to avoid causing the nonhuman primates additional stress. In this revised proposal, we are removing the requirement that primary enclosures must be clearly marked with the words "Do Not Tip" and "This Side Up." We believe that such markings are unnecessary if the enclosures are marked with the words "Wild Animals" or "Live Animals," as proposed. Several commenters stated that the proposed marking provisions do not comply with the marking requirements of the International Air Transport Association (IATA), and recommended that the IATA standards be used. The regulations proposed are the minimum standards we believe necessary to ensure the health and well-being of the animals being transported. In cases where the IATA standards exceed those included in our proposal, there would be nothing prohibiting their use. However, we do not believe it would be appropriate to require that they be used. Further, the IATA standards apply to air transport, and we do not believe it would be appropriate to require them to be used for all forms of transportation.

In § 3.88(g) of our proposal, we proposed that the documents that must accompany the nonhuman primates be held by the operator of the primary conveyance if it is a surface conveyance, or attached to the outside of the primary enclosure. We proposed that if such documents are attached to the primary enclosure, they must be placed in a secure but accessible manner, so that they can be removed and securely returned, and so that they are easily noticed. Several commenters indicated that it would be more appropriate to store shipping documents in an airway bill pouch than to attach them to a primary enclosure. Under our proposed rule, such storage would be permissible and we are making no changes to our proposed rule based on these comments.

We also proposed to require that instructions for food and water, and for administration of drugs, medication, and other special care be attached to the primary enclosure.

Primary Conveyances—Section 3.89
(Revised as Section 3.88)

Prescribed ambient temperature limits in primary conveyances used to transport nonhuman primates were part of the standards before the 1977 revisions to the regulations, but were inadvertently omitted from those revisions. In our proposal, we proposed to reinstate them for surface transportation, in order to prevent nonhuman primates from being transported under temperature conditions that would be harmful to their health and physical well-being. The current regulations prescribe upper and lower ambient temperature limits for nonhuman primates held in terminal facilities and prescribe lower temperature limits for nonhuman primates placed on transporting devices. We believe that it is equally important for the health and well-being of nonhuman primates that these limits be followed while the animals are in transport as well as when they are on either end of their journey. Under the regulations we proposed, all persons subject to the Animal Welfare regulations would be required to maintain the temperature inside a primary conveyance between 45 °F (7.2 °C) and 85 °F (30 °C) during surface transportation at all times a nonhuman primate is present. Because it would be impracticable to monitor the ambient air temperature inside the cargo area during air transportation, we proposed to require instead that it be maintained at a level that ensures the health and well-being of the species housed, in accordance with generally accepted professional and husbandry practices, at all times a nonhuman primate is present. We also proposed to add requirements that a primary enclosure be positioned in a primary conveyance in a manner that provides protection from the elements, such as rain, wind, snow, and sun, and that is far enough away from animals that are generally considered to be natural predators or enemies of nonhuman primates so that the nonhuman primates cannot reach, see, or smell them. We proposed to add these precautions to help avoid exposing nonhuman primates to known causes of distress and to make traveling less stressful for the animals.

Several commenters opposed the provision in proposed § 3.89(e) for a minimum temperature of 45 °F (7.2 °C), and recommended that it be higher. Other commenters recommended that we delete all minimum and maximum temperature standards. We believe that the temperatures standards we proposed are reasonable and tolerable

for nonhuman primates and are making no changes to our proposal based on these comments.

A number of comments recommended that the regulations include a specific minimum distance for separating nonhuman primates from predators or natural enemies. We are making no changes to the proposal based on these comments. Because of the tremendous numbers of variables in shipping conditions, it would be impossible to establish one minimum distance that would be appropriate in all situations. However, we are revising the proposal regarding separation from predators or other enemies to remove the requirement that the nonhuman primates not be able to smell these animals. We are making this change due to the practical difficulties that would be associated with separating the animals in such a way, and also due to the difficulty in determining whether one animal can smell another.

One of the provisions in current § 3.87 that we proposed to retain, and which was included in § 3.89(f) of the proposed rule, was in the requirement that primary enclosures be positioned in the primary conveyance in a manner that allows the nonhuman primates to be removed quickly in an emergency. Several commenters recommended that this requirement be expanded to require that nonhuman primates be loaded last and unloaded first. While we encourage such a practice, and recognize that it is already customarily followed, we do not believe it would be practical to require it in the regulations.

In this revised proposal we are removing certain wording that originally appeared in § 3.89(i) of our proposal. We believe that the wording, concerning which materials may be transported with nonhuman primates, is both redundant and confusing. This wording change does not affect the substance of the provision as originally proposed.

Food and Water Requirements—Section 3.90
(Revised as Section 3.89)

We proposed to make nonsubstantive changes to the current regulations to make it clear that carriers and intermediate handlers must provide food and water to nonhuman primates being transported within a prescribed number of hours from the time the animals were last offered food and water. We proposed to require that consignors subject to the Animal Welfare regulations certify the date and time the nonhuman primate was last offered food and water. Under our proposal, carriers and intermediate handlers would be required to determine the appropriate time for providing food and water based

upon the information in the certification. Everyone else transporting a nonhuman primate would be required to provide food and water within a prescribed number of hours after they last offered the animal food and water. We proposed this requirement so that nonhuman primates would not go longer than 24 hours without food or longer than 12 hours without water. Under our proposal, the prescribed number of hours, the same as in the current regulations, differed based upon the age of the nonhuman primate. We also proposed to require that nonhuman primates must be offered food within 12 hours before being transported in commerce, so that carriers and intermediate handlers would not have to provide food and water immediately upon acceptance. Although, under our proposal, proper food would have to be provided, in accordance with proposed § 3.82, we realize that the necessities of travel may require less variation in the types of food offered and in the method of feeding. Accordingly, we added a footnote in proposed § 3.90 to take the exigencies of travel into account. We proposed to include requirements for design, construction, and placement of food and water containers for the nonhuman primates' safety, comfort, and well-being. As previously discussed, we proposed to incorporate in proposed § 3.87 (revised as § 3.86) the requirement that carriers and intermediate handlers not accept nonhuman primates for transport unless written instructions concerning food and water requirements are affixed to the outside of the primary enclosure. In § 3.90, we proposed to require that consignors subject to the Animal Welfare regulations attach securely to the primary enclosure all written instructions concerning the nonhuman primates' food and water requirements during transportation.

A number of commenters supported proposed § 3.90, as written. One commenter specifically opposed these provisions, which we continue to believe are necessary for the well-being of nonhuman primates in transit. A small number of comments recommended that nonhuman primates in transit have access to fresh, clean water at all times. We believe such a requirement would be impractical, and we are making no changes to our proposal based on these comments. One commenter recommended that the term "potable water" be replaced with the term "water suitable for drinking." The two terms are synonymous and we are making no change to our proposal based on this comment.

One commenter stated that the regulations should require that food be offered twice in 24 hours to animals greater than 1 year of age, and three times in 24 hours to animals less than 1 year of age. We do not believe such a requirement is necessary or would be practical and we are making no changes to our proposal based on this comment. A small number of commenters recommended that, instead of requiring certification of the last feeding and watering, and requiring that the animal be fed and watered within a specified time after acceptance for transport, it be encouraged that the consignor offer food and water to the animal immediately before shipment. We believe that such a change to our proposal would remove a necessary mechanism for ensuring that nonhuman primates do not go excessively long periods of time without food and water. Additionally, it is not wise to give food or water to an animal immediately before transportation, as it may become sick and soil its cage, or aspirate food or water into its lungs. We are therefore making no changes to the proposed regulations based on these comments.

Care in Transit—Section 3.91 (Revised as Section 3.90)

We proposed to clarify current § 3.89 to expressly require compliance with these regulations by any person subject to the Animal Welfare regulations who is transporting a nonhuman primate in commerce, regardless of whether the nonhuman primate is consigned for transport.

We proposed nonsubstantive changes to this section for purposes of clarity along with the following substantive changes.

We proposed to require that during surface transportation, regulated persons must obtain any veterinary care needed for the nonhuman primates at the closest available veterinary facility. We also proposed to require that, during air transportation, carriers or intermediate handlers arrange for any veterinary care that is needed for the nonhuman primates as soon as possible.

We proposed to add an exception to the current regulations to prohibit the transportation in commerce of a nonhuman primate in obvious physical distress, in order to allow transport for the purpose of providing veterinary care for the condition.

When nonhuman primates are initially removed from their primary enclosures after travel they may be unusually active or perhaps agitated. In order to avoid any resultant injury to the animals we proposed a requirement that would allow only authorized and experienced persons to remove

nonhuman primates from their primary enclosures during transport in order to protect both the nonhuman primates, which could injure themselves in frenzied movement, and the people handling them. In this revised proposal, we are retaining this provision, but are adding qualifying language to provide that other individuals may remove the nonhuman primates if required for the health or well-being of the animals.

In our original proposal, we proposed to add a paragraph that would specify that these transportation standards remain in effect and must continue to be complied with until the animal reaches its final destination, or until the consignee takes physical delivery of the animal if the animal has been consigned for transportation. In the proposal, we stated our belief that this provision is necessary to prevent any gap in care for the nonhuman primates and in responsibility for its care. While we continue to believe that it is important to insure that no gaps occur in the care of the nonhuman primates in transportation, we believe that this intent could be clarified by making a change in the wording of our original proposal. To eliminate any confusion as to what constitutes "final destination," we are changing our proposal to provide that the transportation regulations must be complied with until a consignee takes physical delivery of the nonhuman primate if it is consigned for transportation, or until the animal is returned to the consignor.

A number of commenters supported the provisions of proposed § 3.91 as written. One of the provisions of the current regulations, which we proposed to include in § 3.91(a) and (b), was that the animals in transit must be checked on at least every 4 hours. One commenter recommended this provision be changed to at least once every 6 to 8 hours. Based on our experience the current regulations, we believe the current standards of monitoring at least every 4 hours already represent an acceptable minimum, and are making no changes to our proposal based on this comment.

Terminal Facilities—Section 3.92 (Revised as Section 3.91)

Current § 3.90 imposes duties on carriers and intermediate handlers holding nonhuman primates in animal holding areas of terminals to keep the animals away from inanimate cargo, to clean and sanitize the area, to have an effective pest control program, to provide air, and to maintain the ambient temperature within certain prescribed limits. Under the current regulations, there is no similar obligation imposed upon other persons who transport these

animals. As a result, animals could be held in animal holding areas under hazardous conditions.

We proposed that the same duties currently imposed upon carriers and intermediate handlers be imposed upon any person subject to the Animal Welfare regulations transporting nonhuman primates and holding them in animal holding areas, since the animals require the same minimum level of care regardless of which regulated person is transporting the animals.

We proposed to add restrictions to prevent regulated persons from holding nonhuman primates within physical and visual reach of other animals and other species of nonhuman primates, since this is upsetting to them. We are also proposing that the length of time regulated persons be allowed to hold nonhuman primates in terminal facilities upon arrival be the same as that allowed for consigned animals under proposed § 3.87(g) (revised as § 3.86(g)). In our proposal, we stated our belief that this limitation on holding periods in terminal facilities is necessary to prevent regulated persons from leaving nonhuman primates in terminal facilities for any reason, such as to await additional shipments, and that, as a result, the stress of travel for nonhuman primates would be reduced.

In proposed § 3.92, we proposed to continue the temperature and ventilation requirements contained in current § 3.90 and also to include the provisions requiring shelter from the elements for nonhuman primates that are currently included in § 3.91 "Handling," because they are applicable to regulated persons holding nonhuman primates in animal holding areas of terminal facilities. Under our proposal, the proposed regulations for handling would be limited to the safeguards that must be provided during physical handling and movement of nonhuman primates, as its heading suggests.

A number of commenters supported the provisions of proposed § 3.92 as written. A small number of commenters stated in general that the proposed provisions were too strict and restrictive. One commenter expressed concern that the proposed temperature requirements would prevent many airports from accepting primate shipments. We are making no changes based on these comments. The provisions proposed are provisions that have been in effect since 1978, and have presented no significant practical problems since that time. A number of commenters stated that it was inconsistent to allow animals to commingle with inanimate cargo in the

cargo areas of a conveyance, but not in terminal facilities. While we agree that it would be desirable to impose such a restriction with regard to primary conveyances, standard transportation practices would make such a restriction impractical and unworkable. However, it is possible to separate animals from inanimate cargo in terminal facilities, and we continue to believe it is appropriate for the well-being of the animals to retain such a restriction.

One commenter recommended that bedding be required when the ambient temperature reaches a low of 45° F. We are not certain what type of bedding the commenter is referring to. Proposed § 3.88 would require litter in primary enclosures. If the commenter is referring to additional forms of bedding, while we encourage such use, we believe that it would be impractical to require it in the regulations.

Based on comments we received in response to other areas of our proposed rule, we are making a wording change in § 3.92(c) of this revised proposal to read that "ventilation," rather than "air, preferably fresh air" must be provided in animal holding areas. The information presented to us indicates that in many cases recycled air is of superior quality to "fresh" air.

Handling—section 3.93 (Revised as section 3.92)

Current § 3.91 imposes duties on carriers and intermediate handlers for proper handling and movement of nonhuman primates. For the reasons explained above under "Terminal facilities," we proposed that these same duties be imposed upon any person subject to the Animal Welfare regulations handling a nonhuman primate at any time during the course of transportation in commerce, so that the animals' health, safety, and well-being will be protected at all times during transport. The regulations we proposed would continue to include movement from an animal holding area of a terminal facility to a primary conveyance and from a primary conveyance to a terminal facility. They would also continue to provide requirements for movement of a nonhuman primate on a transporting device. We proposed to broaden this section to include movement within and between primary conveyances, and movement within and between terminal facilities, because nonhuman primates may travel on several different primary conveyances and be moved around within terminal complexes in the course of their travel.

We also proposed to require that transporting devices on which nonhuman primates are placed to move

them be covered to protect the nonhuman primates when the outdoor temperature falls below 45° (7.2° C). The current regulations require this protection when the outdoor temperature falls below 50° (10° C). In our proposal, we stated our belief that providing this protection becomes necessary at the lower temperature proposed, and that the proposed requirement will protect the health and well-being of nonhuman primates. One commenter recommended that the temperature provisions in the section on handling be modeled after the provisions for dogs and cats housed in outdoor housing facilities. We believe that the difference between housing conditions and transportation conditions are too great to make the use of the same regulations appropriate. We are therefore making no changes to the proposal based on this comment.

Air carriers commonly use conveyor belts and inclined belts for loading and unloading animals into airplane cargo space. These methods of loading can cause psychological distress to the animals. We proposed to allow nonhuman primates to be placed on inclined conveyor belts used for loading and unloading aircraft only, and only if an attendant is present at each end of the conveyor belt in case an animal has an extreme adverse reaction. We proposed to prohibit placing nonhuman primates on unattended conveyor belts or on elevated conveyor belts, such as baggage claim conveyor belts, since these forms of tilted movement cause nonhuman primates extreme distress and alternative means of moving the animals can generally be provided without great inconvenience. The transport crate is also more subject to tipping over or falling when on conveyor belts if the animal becomes excited or agitated. We are making no changes regarding these provisions in this revised proposal.

Miscellaneous

Some commenters recommended that we make various nonsubstantive wording changes to the proposal for purposes of clarity. We have made such changes where we considered them appropriate. Additionally, a number of commenters made recommendation that addressed issues outside the scope of our proposal, including recommended husbandry practices and requires that we extend our enforcement to animals not currently regulated. While we are making no changes to our proposal based on these comments, we have carefully reviewed them and will take whatever action is appropriate.

Public Comments on Regulatory Impact Analysis and Regulatory Flexibility Act Analysis

As required by Executive Order 12291, we conducted a preliminary regulatory impact analysis regarding the proposed rule. The preliminary analysis determined that implementation of all the proposed revisions and additions to the existing regulations would have a cost impact in excess of \$100 million on the economy. Thus the proposed rule would be a "major rule."

At the outset of the preliminary regulatory impact analysis, we determined that the congressional mandate to promulgate more stringent regulations reflected the increasing public concern for and the absence of an appropriate market mechanism that adequately provides humane care and treatment of animals. We also determined that extensive and complex analysis of alternative provisions may be necessary to develop a rule that would minimize the regulatory impact on regulated establishments and the economy. Furthermore, we determined that the complexity of the factors being measured, the lack of statistical or any other available data source, the diversity of regulated establishments, and time and resource constraints would impact the extent of analysis.

We relied on several informational sources, such as expert opinion from across the country, inspection forms of regulated sites, and experience in the implementation of animal welfare regulations in assessing the potential regulatory burden. The preliminary regulatory impact analysis represented our best efforts to promulgate adequate regulations as mandated by the Act and to fulfill our obligations under Executive Order 12291.

We received many comments from the research community, dealers, and the general public noting that the preliminary regulatory impact analysis contained "overinflated" cost estimates. Only one of the comments from the general public provided detailed information of alternative estimates of compliance costs for each new provision in the proposed rule. Most of the comments contained a formatted statement indicating that costs in the analysis were "overinflated," and that well-run animal facilities already comply with the proposed requirements.

Conversely, we also received comments from the research community and the general public stating that the cost estimates in the preliminary regulatory impact analysis were too low. Again, only one commenter from the

research community provided detailed information and different compliance cost estimates for implementing the proposed rules. The commenter's estimates doubled our cost estimates.

Many commenters also stated that the proposed rule would inflate the cost of animal research, making it cost prohibitive. Others stated that the proposed rule would cost too much to implement and would put small dealers out of business. In addition, a few commenters from the research community stated that the proposed rule would cost too much and would put small researchers out of business. A small number of commenters stated that the proposed amendments would reduce the availability of puppies and litters and/or make pets too expensive.

The proposed amendments to the regulations that would have the greatest economic impact—the exercise of dogs and the establishment of environments to promote the psychological well-being of nonhuman primates—were mandated by the 1985 amendments to the Act. Although, as discussed below, the provisions of this revised proposal would have a significantly reduced economic impact from those of the original proposal, the economic impact would not be eliminated.

As noted, upon review of the many comments received and ongoing consultation with other Federal agencies, we have developed an alternative proposal, set forth in this document. In doing so, we have considered and will continue to consider all alternative, but enforceable, approaches in order to develop final regulations that will impose the least cost on regulated establishments within statutory goals. This revised proposal incorporates many of the comments received in response to the previous proposed rule, contains more performance-based standards, and minimizes the potential regulatory impact on affected establishments.

A large number of commenters, primarily from the research community, stated that insufficient detail was included in the preliminary regulatory impact analysis to explain the discrepancies between that analysis and one conducted by a national research association. These commenters stated that, according to the alternative analysis submitted, a 15 percent reduction in expenditures for actual research would be an important effect of the proposed regulations. Again, it is important to note that the regulatory impact analysis for this revised proposal indicates a significantly reduced impact from that projected for the original proposal. With regard to the

discrepancies between the published regulatory impact analysis and the alternative analysis, we must assume that the use of different methodologies in the assessment of potential compliance costs have led to different results. There is no disagreement over whether the proposed amendments would have a significant economic effect. We do disagree, however, with the way the figures regarding the potential impact are interpreted in the commenters' analysis. The regulatory impact analysis for the original proposal distinguished between capital expenditures, which would have been a large part of the impact from the proposed provisions, and annual expenditures, through which actual research activities are funded. We believe that the variability among funding procedures for different research facilities does not allow the conclusion that the proposed rule would cause a 15 percent reduction in expenditures for actual research.

Some commenters from the research community asserted that we failed to do a cost-benefit analysis as required by Executive Order 12291. Many more commenters from the research community and the general public stated that the regulations would provide no benefit to animals or improvements in animal care.

The general requirements for a regulatory impact analysis under Executive Order 12291 of proposed Federal rules require an identification of the costs and benefits of a proposed rule. They provide that benefits and costs be examined and that regulatory objectives be chosen to maximize net benefits to society or involve the least cost to society. The preliminary regulatory impact analysis we conducted for the previous proposal examined the potential benefits to society and animals arising from the proposed rule, and indicated that these benefits could not be precisely quantified. In the absence of actual dollar figures for benefits, it was impossible to estimate the net potential benefits expressed in dollar amounts.

A large number of commenters disagreed with the statement in the summary of the regulatory impact analysis included with the proposed rule that study results do not suggest that the proposed regulations would cause research establishments to abandon the use of animals. The data available to us continues to support that original conclusion. This determination is discussed below under the heading "Executive Order 12291."

Many commenters stated that no documentation was provided for the

calculations in the preliminary regulatory impact analysis. The data utilized in the analysis was included as an appendix to the study, which was available for public inspection.

A number of commenters stated that the proposed amendments to the transportation standards in the regulations would result in a substantial increase in the cost of research animals. As stated above, we agree that the proposed amendments would have an economic impact. With regard to increased transportation costs, however, there was insufficient data available to project the costs of revised transportation standards. We invite and welcome comments or pertinent information regarding this area.

We disagree with the opinion expressed by many commenters that animals will not receive improved animal care or benefits under amended regulations. There is considerable scientific data that supports the regulatory requirements designed to increase the level of animal care and treatment afforded to animals in regulated establishments. Requirements that provide for better and enriched animal housing environments, appropriate veterinary care, and procedures that minimize animal pain and discomfort will, we believe, improve animal welfare and benefit regulated animals.

Some commenters from the research community and the general public stated that the Department has failed to consider alternatives that will achieve statutory goals and involve the least cost to society. We disagree with these commenters. In developing the proposed rule, we sought comments and input from the regulated establishments, the general public, and interested Federal agencies. Previous proposals contain extensive discussion and explanation of alternative provisions for each new revision or change required by the amendments. Our revisions to the proposed rule contained in this document reflect our continued effort to identify and analyze alternatives and select appropriate requirements to meet the statutory objectives. We will also finalize rules only after all relevant factors are considered, including least costly alternatives, in achieving statutory goals.

A small number of commenters addressed issues regarding the potential costs of the proposed provisions that were outside the scope of the proposal and its accompanying economic analyses. Some of these commenters stated that Congress should provide additional funds to the research

community to implement the new regulations. Others stated that the projected costs could be better spent finding cures for life-threatening diseases and saving human lives. Although we consider these issues important ones, they concern areas outside the purview of the Department.

Statutory Authority for This Proposed Rule

This proposed rule is issued pursuant to the Animal Welfare Act (Act), as amended, 7 U.S.C. 2131-2157. Congress, in enacting the Food Security Act of 1985, Pub. L. No. 99-193, added significantly to the Secretary's existing responsibilities to promulgate standards for the care and treatment of animals covered under the Act. The declared policy of the Act is to ensure that animals intended for use in research facilities, as pets, or for exhibition purposes, are provided humane care and treatment; to assure the humane treatment of animals during transportation; and to prevent the sale of stolen animals.

The Act requires that the Secretary of Agriculture promulgate standards to govern the humane handling, care, treatment and transportation of animals by dealers, operators of auction sales, research facilities, exhibitors, and carriers and intermediate handlers. These standards are to include minimum requirements for handling, housing, feeding, watering, sanitation, ventilation, shelter from extremes of weather and temperatures, adequate veterinary care, and separation of species. The 1985 amendments to the Act specifically require the Secretary to promulgate standards for exercise of dogs and for a physical environment adequate to promote the psychological well-being of primates.

The proposed rule includes changes and additions to the standards required by the 1985 amendments as well as modifications based on our experience in administering and enforcing the Act. The Act authorizes these changes specifically in section 13 (7 U.S.C. 2143) and in the grant of rulemaking authority contained in section 21 (7 U.S.C. 2151).

Executive Order 12291

We have examined the regulatory impact of this revised proposal in accordance with Executive Order 12291.

We are publishing revised proposed standards for the humane handling, care, treatment, and transportation of dogs, cats, and nonhuman primates (subparts A and D, part 3, Standards). These revised proposed standards include standards for exercise of dogs and for a physical environment

adequate to promote the psychological well-being of nonhuman primates, as required by the amendments to the Act. The amendments to the Act reflect a Congressional determination that additional or revised standards governing the humane care and treatment of animals are desirable and necessary. Further impetus of the 1985 amendments expanding the Animal Welfare Act arises from the determination of the absence of an adequate market mechanism to ensure a socially optimal level of welfare afforded to animals used in the production activities of regulated establishments.

We are reproposing these rules because of the significant changes we have made to our original proposal. This new proposal is based on an examination of alternative standards, the close to 10,700 comments received on a proposal to amend part 3 published in the Federal Register on March 15, 1989, professional opinions, and ongoing consultation with other Federal agencies. Furthermore, this revised proposal is fully consistent with the Department's authority under the Act.

The regulatory impact of this reproposal is discussed in more detail in a Regulatory Impact and Flexibility Study, which is available for public inspection in Room 1141 of the South Building, U.S. Department of Agriculture between 8:00 a.m. and 4:30 p.m., Monday through Friday, except holidays (address above). The main findings of the study are discussed below.

The largest regulatory burden of this reproposal may result from the requirements to ensure the exercise of dogs and a physical environment that promotes the psychological well-being of nonhuman primates.

Compliance with these repropounded standards may result in additional costs for regulated establishments over those imposed by the current standards. Study results indicate that regulated establishments may be required to spend approximately \$158 million for additional capital improvements and \$39 million in annual operating costs once the regulations become effective. The study indicates that over 73 percent of the total capital expenditures resulting from this reproposal would potentially fall on research facilities. The study also indicates that approximately 92 percent of the annual operating costs required by this reproposal would potentially fall on research facilities. The discounted value of the impact on the total regulated industry is estimated at approximately \$552 million. These additional costs indicate that the new proposed standards in part 3 would

constitute a "major rule" impact, and may significantly increase costs for animal care and housing.

These additional compliance costs may also result in increased costs for animal exhibits, pet owners and sport, and numerous types of biomedical research and drug development where there are no available alternatives that fully replace the use of a living biological system. Continued animal research is vital to develop therapies for diseases such as AIDS, Parkinson's disease, and heart diseases. Important tradeoffs between the welfare of animals and human welfare may occur.

Little evidence exists to indicate that increased regulatory costs would cause regulated establishments to abandon their uses of animals. In order to maintain the same level of activity, the cost of production of these establishments may increase in the short run. However, for those forms of research where alternative testing methods that do not require the use of animals exist, the imposition of the proposed regulations may have the effect of promoting more rapid development of alternative technologies which might otherwise take longer to evolve. In the long run, the availability of alternatives to animal uses in research, testing, and education may moderate the initial increase in the cost of production.

A more stringent set of standards was considered in the proposal to amend part 3 that was published in the Federal Register on March 15, 1989. The discounted value of the total impact of the previously proposed rule was estimated at \$1.75 billion dollars, an amount over three times the impact estimated for this revised proposal. This result is to be expected since the performance-oriented standards in the reproposal provide more flexibility, thus allowing the regulated establishments to meet requirements through several means of compliance.

Potential benefits resulting from the new standards were discussed in this study, but could not be quantified. If the public perception of levels of animal welfare increase with the level of stringency of the regulations, then the benefits of greater public satisfaction will also accrue to society. However, given the difficulties in the quantification of benefits, the least cost criteria indicate that the performance-based alternatives should be preferred. This is because these alternatives provide more flexibility for the regulated establishments in achieving compliance.

The conclusions reached in the regulatory analysis require a number of

qualifications because of the exclusion of other important variables in addition to the valuation of benefits. Critical data deficiencies currently exist in measuring the anticipated changes in animal housing conditions and the population of animals housed by the regulated industry. Some of the difficulties are inherent in the diversity of factors being measured, others reflect the dearth of data collection efforts. The complexity of issues associated with animal welfare regulations also hinder the comprehensive assessment of impacts in a short period of time. Efforts should be made to improve baseline information, not for analytical purposes alone, but to improve the development of Federal animal welfare requirements. Furthermore, policymakers will benefit from an examination of the diversity of functions, sizes and geographical distribution of regulated industries across the nation.

We intend to collect additional information and refine the regulatory impact analysis of this revised proposal. We welcome comments or pertinent information concerning the changes in this regulatory action. The final regulatory impact analysis will be available upon publication of the final rulemaking for subparts A and D of part 3. It is not expected that the final analysis will affect the determination that this rule would have an impact in excess of \$100 million annually. However, we will continue to examine alternative approaches which will minimize the regulatory burden on regulated establishments within the statutory requirements.

Regulatory Flexibility Act

We have analyzed the potential impact of this revised proposal on small entities, as required by the Regulatory Flexibility Act (Pub. L. 96-354).

The impact of this proposal on small entities is discussed in more detail in a Regulatory Impact and Flexibility Analysis, which is available for public inspection in Room 1141 of the South Building, U.S. Department of Agriculture between 8:00 a.m. and 4:30 p.m., Monday through Friday, except holidays (address above).

We estimate that approximately 1,460 small entities may be affected by the revised requirements in subchapters A and D, part 3, Standards, in this proposal. These 1,460 entities represent about 39 percent of all small establishments (3,771) licensed to operate animal ventures under provisions of the Act. Among the affected entities are 1,227 small breeders, 183 small dealers, and 50 small exhibitors. We do not expect any

regulatory impact of this proposal on small research sites. No research site or facility housing cats, dogs, or nonhuman primates for research, testing, or educational purposes would qualify as a small entity.

The total regulatory burden on small breeders, dealers, and exhibitors of this proposal is estimated at approximately \$32.4 million. This estimate represents the sum of discounted values of annual costs (\$1.64 million per year discounted at 10 percent into perpetuity) to hire additional animal caretakers or handlers and capital expenditures (\$16 million in the first year) to replace, construct, or equip new cat, dog, and nonhuman primate enclosures and improve sheltered housing facilities. The average discounted impact per affected small entity is estimated at approximately \$22,171 per site.

Of the small regulated entities, small breeders would be most affected by this proposal. Breeders represent about 57 percent of all small regulated entities and may incur approximately 80 percent of the estimated compliance costs, mostly from the new revised requirements for the exercise of dogs. An important distributional effect of the proposal is that the impact on breeders will be concentrated on dog breeders in the Midwest region of the country. Eighty-five percent of all breeders are located in this region.

An important result of the regulatory flexibility analysis is that, in developing this proposal, we have chosen a less costly approach to amend subparts A and D of part 3, Standards. The preliminary regulatory flexibility analysis of the March 15, 1989, rule estimated a discounted value of the total impact on all small affected entities at about \$153.7 million, or an average of \$105,249 per affected site. A comparison between the previously proposed rule and this proposal indicates a potential five-fold decrease in the costs imposed on affected small entities.

We intend to collect additional information and refine the regulatory flexibility analysis of this proposal. We welcome comments or pertinent information concerning the regulatory burden on small regulated entities. The result will be available upon publication on the final rulemaking for subparts A and D of part 3.

Executive Order 12372

These programs/activities under 9 CFR part 3, subparts A, B, C, and D, are listed in the Catalog of Federal Domestic Assistance under No. 10.025 and are subject to the provisions of Executive Order 12372, which requires

intergovernmental consultation with State and local officials. (See 7 CFR part 3015, subpart V.)

Paperwork Reduction Act

In accordance with section 3507 of the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35), the information collected provisions that are included in this proposed rule will be submitted for approval to the Office of Management and Budget (OMB). Your written comments will be considered if you submit them to the Office of Information and Regulatory Affairs, OMB, Attention: Desk Officer for APHIS, Washington, DC 20503. You should submit a duplicate copy of your comments to Chief, Regulatory Analysis and Development, PPD, APHIS, USDA, Room 866, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782.

List of Subjects in 9 CFR Part 3

Animal welfare, Humane animal handling, Pets, Reporting and recordkeeping requirements, Transportation.

Accordingly, we propose to amend 9 CFR part 3 as follows:

PART 3—STANDARDS

1. The authority citation for part 3 would be revised to read as follows, and the authority citation following all the sections would be removed:

Authority: 7 U.S.C. 2131-2158; 7 CFR 2.17, 2.51, and 371.2(d).

2. Subpart A would be revised to read as follows:

Subpart A—Specifications for the Humane Handling, Care, Treatment, and Transportation of Dogs and Cats

Facilities and Operating Standards

Sec.

- 3.1 Housing facilities, general.
- 3.2 Indoor housing facilities.
- 3.3 Sheltered housing facilities.
- 3.4 Outdoor housing facilities.
- 3.5 Mobile or traveling housing facilities.
- 3.6 Primary enclosures.

Animal Health and Husbandry Standards

- 3.7 Exercise and socialization for dogs.
- 3.8 Feeding.
- 3.9 Watering.
- 3.10 Cleaning, sanitization, housekeeping, and pest control.
- 3.11 Employees.
- 3.12 Social grouping.

Transportation Standards

- 3.13 Consignments to carriers and intermediate handlers.
- 3.14 Primary enclosures used to transport live dogs and cats.

- 3.15 Primary conveyances (motor vehicle, rail, air, and marine).
- 3.16 Food and water requirements.
- 3.17 Care in transit.
- 3.18 Terminal facilities.
- 3.19 Handling.

Subpart A—Specifications for the Humane Handling, Care, Treatment, and Transportation of Dogs and Cats¹

Facilities and Operating Standards

§ 3.1 Housing facilities, general.

(a) *Structure; construction.* Housing facilities for dogs and cats must be designed and constructed so that they are structurally sound. They must be kept in good repair, and they must protect the animals from injury, contain the animals securely, and restrict other animals and unauthorized humans from entering.

(b) *Condition and site.* Housing facilities and areas used for storing animal food or bedding must be free of any accumulation of trash, waste material, junk, weeds, and other discarded materials. Animal areas inside of housing facilities must be kept neat and free of clutter, including equipment, furniture, and stored material, but may contain materials actually used and necessary for cleaning the area, and fixtures or equipment necessary for proper husbandry practices and research needs. Housing facilities other than those maintained by research facilities and Federal research facilities must be physically separated from any other business. If a housing facility is located on the same premises as another business, it must be physically separated from the other business so that unauthorized humans, and animals the size of dogs, skunks, and raccoons are prevented from entering it.

(c) *Surfaces.*—(1) *General requirements.* The surfaces of housing facilities—including houses, dens, and other furniture-type fixtures and objects within the facility—must be constructed in a manner and made of materials that allow them to be readily cleaned and sanitized, or removed or replaced when worn or soiled. Interior surfaces and any surfaces that come in contact with dogs or cats must:

- (i) Be free of excessive rust that prevents the required cleaning and sanitization, or that affects the structural strength of the surface; and
- (ii) Be free of jagged edges or sharp points that might injure the animals.

(2) *Maintenance and replacement of surfaces.* All surfaces must be

maintained on a regular basis. Surfaces of housing facilities—including houses, dens, and other furniture-type fixtures and objects within the facility—that cannot be readily cleaned and sanitized, must be replaced when worn or soiled.

(3) *Cleaning.* Hard surfaces with which the dogs or cats come in contact must be spot-cleaned daily and sanitized in accordance with § 3.10(b) of this subpart to prevent any accumulation of excreta and reduce disease hazards. Floors made of dirt, absorbent bedding, sand, gravel, grass, or other similar material must be raked or spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta. Contaminated material must be replaced whenever this raking and spot-cleaning is not sufficient to prevent or eliminate odors, insects, pests, or vermin infestation. All other surfaces of housing facilities must be cleaned and sanitized when necessary to satisfy generally accepted husbandry standards and practices. Sanitization may be done using any of the methods provided in § 3.10(b)(3) for primary enclosures.

(d) *Water and electric power.* The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting, and for carrying out other husbandry requirements in accordance with the regulations in this subpart. The housing facility must provide adequate running potable water for the dogs' and cats' drinking needs, for cleaning, and for carrying out other husbandry requirements.

(e) *Storage.* Supplies of food and bedding must be stored in a manner that protects the supplies from spoilage, contamination, and vermin infestation. The supplies must be stored off the floor and away from the walls, to allow cleaning underneath and around the supplies. Foods requiring refrigeration must be stored accordingly, and all food must be stored in a manner that prevents contamination and deterioration of its nutritive value. All open supplies of food and bedding must be kept in leakproof containers with tightly fitting lids to prevent contamination and spoilage. Only food and bedding that is currently being used may be kept in the animal areas. Substances that are toxic to the dogs or cats must not be stored in food storage and preparation areas, but may be stored in cabinets in the animal areas.

(f) *Drainage and waste disposal.* Housing facility operators must provide for regular and frequent collection, removal, and disposal of animal and food wastes, bedding, debris, garbage, water, other fluids and wastes, and dead

animals, in a manner that minimizes contamination and disease risks. Housing facilities must be equipped with disposal facilities and drainage systems that are constructed and operated so that animal waste and water are rapidly eliminated and animals stay dry. Disposal and drainage systems must minimize vermin and pest infestation, insects, odors, and disease hazards. All drains must be properly constructed, installed, and maintained. If closed drainage systems are used, they must be equipped with traps and prevent the backflow of gases and the backup of sewage onto the floor. If the facility uses sump or settlement ponds, or other similar systems for drainage and animal waste disposal, the system must be located far enough away from the animal area of the housing facility to prevent odors, diseases, pests, and vermin infestation. Standing puddles of water in animal enclosures must be drained or mopped up so that the animals stay dry. Trash containers in housing facilities and in food storage and food preparation areas must be leakproof and must have tightly fitted lids on them at all times. Dead animals, animal parts, and animal waste must not be kept in food storage or food preparation areas, food freezers, food refrigerators, or animal areas.

(g) *Washrooms and sinks.* Washing facilities such as washrooms, basins, sinks, or showers must be provided for animal caretakers and must be readily accessible.

§ 3.2 Indoor housing facilities.

(a) *Heating, cooling, and temperature.* Indoor housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature extremes and to provide for their health and well-being. When dogs or cats are present, the ambient temperature in the facility must not fall below 50 °F (10 °C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress or discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs and cats, except as approved by the attending veterinarian. The ambient temperature must not fall below 35 °F (1.7 °C) and must not rise above 95 °F (35 °C) when dogs or cats are present.

(b) *Ventilation.* Indoor housing facilities for dogs and cats must be sufficiently ventilated at all times when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation

¹ These minimum standards apply only to live dogs and cats, unless stated otherwise.

must be provided by windows, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning must be provided when the ambient temperature is 85 °F (29.5 °C) or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs or cats housed therein, in accordance with the directions of the attending veterinarian and generally accepted professional and husbandry practices.

(c) *Lighting.* Indoor housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs and cats from excessive light.

(d) *Interior surfaces.* The floors and walls of indoor housing facilities, and any other surfaces in contact with the animals, must be impervious to moisture. The ceilings of indoor housing facilities must be impervious to moisture or be replaceable (e.g., a suspended ceiling with replaceable panels).

§ 3.3 Sheltered housing facilities.

(a) *Heating, cooling, and temperature.* The sheltered part of sheltered housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature extremes and to provide for their health and well-being. The ambient temperature in the sheltered part of the facility must not fall below 50 °F (10 °C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress or discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs and cats, except as approved by the attending veterinarian. The ambient temperature must not fall below 35 °F (1.7 °C) and must not rise above 95 °F (35 °C) when dogs or cats are present.

(b) *Ventilation.* The enclosed or sheltered part of sheltered housing facilities for dogs and cats must be sufficiently ventilated when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, vents, fans, or air conditioning. Auxiliary ventilation, such

as fans, blowers, or air conditioning, must be provided when the ambient temperature is 85 °F (29.5 °C) or higher.

(c) *Lighting.* Sheltered housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs and cats from excessive light.

(d) *Shelter from the elements.* Dogs and cats must be provided with adequate shelter from the elements at all times to protect their health and well-being.

(e) *Surfaces.* (1) The following areas in sheltered housing facilities must be impervious to moisture:

(i) Indoor floor areas in contact with the animals;

(ii) Outdoor floor areas in contact with the animals, when the floor areas are not exposed to the direct sun, or are made of a hard material such as wire, wood, metal, or concrete; and

(iii) All walls, boxes, houses, dens, and other surfaces in contact with the animals.

(2) Outdoor floor areas in contact with the animals and exposed to the direct sun may consist of compacted earth, absorbent bedding, sand, gravel, or grass.

§ 3.4 Outdoor housing facilities.

(a) *Restrictions.* (1) The following categories of dogs or cats must not be kept in outdoor facilities, unless that practice is specifically approved by the attending veterinarian:

(i) Dogs or cats that are not acclimated to the temperatures prevalent in the area or region where they are maintained;

(ii) Breeds of dogs or cats that cannot tolerate the prevalent temperatures of the area without stress or discomfort (such as short-haired breeds in cold climates); and

(iii) Sick, infirm, aged or young dogs or cats.

(2) When their acclimation status is unknown, dogs and cats must not be kept in outdoor facilities when the ambient temperature is less than 35 °F (1.7 °C).

(b) *Shelter from the elements.* Outdoor facilities for dogs or cats must include one or more shelter structures

that are accessible to each animal in each outdoor facility, and that are large enough to allow each animal in the shelter structure to sit, stand, and lie in a normal manner, and to turn about freely. In addition to the shelter structures, one or more separate outside areas of shade must be provided, large enough to contain all the animals at one time and protect them from the direct rays of the sun. Shelters in outdoor facilities for dogs or cats must contain a roof, four sides, and a floor, and must:

(1) Provide the dogs and cats with adequate protection and shelter from the cold and heat;

(2) Provide the dogs and cats with protection from the direct rays of the sun and the direct effect of wind, rain, or snow;

(3) Be provided with a wind break and rain break at the entrance; and

(4) Contain clean, dry, bedding material if the ambient temperature is below 50 °F (10 °C). Additional clean, dry bedding is required when the temperature is 35 °F (1.7 °C) or lower.

(c) *Construction.* Building surfaces in contact with animals in outdoor housing facilities must be impervious to moisture. Metal barrels, cans, refrigerators or freezers, and the like must not be used as shelter structures. The floors of outdoor housing facilities may be of compacted earth, absorbent bedding, sand, gravel, or grass, and must be replaced if there are any prevalent odors, diseases, insects, pests, or vermin. All surfaces must be maintained on a regular basis. Surfaces of outdoor housing facilities—including houses, dens, etc.—that cannot be readily cleaned and sanitized, must be replaced when worn or soiled.

§ 3.5 Mobile or traveling housing facilities.

(a) *Heating, cooling, and temperature.* Mobile or traveling housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature extremes and to provide for their health and well-being. The ambient temperature in the mobile or traveling housing facility must not fall below 50 °F (10 °C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress or discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs and cats. The ambient temperature must not fall below 35 °F (1.7 °C) and must not rise above 95 °F (35 °C) when dogs or cats are present.

(b) *Ventilation.* Mobile or traveling housing facilities for dogs and cats must be sufficiently ventilated at all times when dogs or cats are present to provide

for their health and well-being of the animals, and to minimize odors, drafts, ammonia levels, moisture condensation, and exhaust fumes. Ventilation must be provided by windows, doors, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning, must be provided when the ambient temperature within the animal housing area is 85 °F (29.5 °C) or higher.

(c) *Lighting.* Mobile or traveling housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals.

§ 3.6 Primary enclosures.

Primary enclosures for dogs and cats must meet the following minimum requirements:

(a) *General requirements.* (1) Primary enclosures must be designed and constructed of suitable materials so that they are structurally sound. The primary enclosures must be kept in good repair.

(2) Primary enclosures must be constructed and maintained so that they:

(i) Have no sharp points or edges that could injure the dogs and cats;

(ii) Protect the dogs and cats from injury;

(iii) Contain the dogs and cats securely;

(iv) Keep other animals and unauthorized individuals from entering the enclosure;

(v) Enable the dogs and cats to remain dry and clean;

(vi) Provide shelter and protection from extreme temperatures and weather conditions that may be uncomfortable or hazardous to the dogs and cats;

(vii) Provide sufficient shade to shelter all the dogs and cats housed in the primary enclosure at one time;

(viii) Provide the dogs and cats with easy and convenient access to clean food and water;

(ix) Enable all surfaces in contact with the dogs and cats to be readily cleaned and sanitized in accordance with § 3.10(b) of this subpart, or be replaceable when worn or soiled;

(x) Have floors that are constructed in a manner that protects the dogs' and cats' feet and legs from injury, and that, if of mesh or slatted construction, do not

allow the dogs' and cats' feet to pass through any openings in the floor; and

(xi) Provide sufficient space to allow each dog and cat to turn about freely, to stand, sit, and lie in a comfortable, normal position, and to walk in a normal manner.

(b) *Additional requirements for cats.*—(1) *Space.* Each cat, including weaned kittens, that is housed in any primary enclosure must be provided minimum vertical space and floor space as follows:

(i) Each primary enclosure housing cats must be at least 24 in. high (60.96 cm);

(ii) Cats up to and including 8.8 lbs. (4 kg) must be provided with at least 3.0 ft² (0.28 m²);

(iii) Cats over 8.8 lbs (4 kg) must be provided with at least 4.0 ft² (0.37 m²);

(iv) Each queen with nursing kittens must be provided with an additional amount of floor space, based on her breed and behavioral characteristics, and in accordance with generally accepted husbandry practices as determined by the attending veterinarian. If the additional amount of floor space for each nursing kitten is equivalent to less than 5 percent of the minimum requirement for the queen, such housing must be approved by the Committee in the case of a research facility, and, in the case of dealers and exhibitors, such housing must be approved by the Administrator; and

(v) The minimum floor space required by this section is exclusive of any food or water pans. The litter pan may be considered part of the floor space if properly cleaned and sanitized.

(2) *Compatibility.* All cats housed in the same primary enclosure must be compatible, as determined by observation. Not more than 12 adult nonconditioned cats may be housed in the same primary enclosure. Queens in heat may not be housed in the same primary enclosure with sexually mature males, except for breeding. Except when maintained in breeding colonies, queens with litters may not be housed in the same primary enclosure with other adult cats, and kittens under 4 months of age may not be housed in the same primary enclosure with adult cats, other than the dam. Cats with a vicious or aggressive disposition must be housed separately.

(3) *Litter.* In all primary enclosures having a solid floor, a receptacle containing sufficient clean litter must be provided to contain excreta and body wastes.

(4) *Resting surfaces.* Each primary enclosure housing cats must contain a resting surface or surfaces that, in the aggregate, are large enough to hold all the occupants of the primary enclosure

at the same time comfortably. The resting surfaces must be elevated, impervious to moisture, and be able to be easily cleaned and sanitized, or easily replaced when soiled or worn. Low resting surfaces will be considered part of the minimum floor space.

(5) *Cats in mobile or traveling shows or acts.* Cats that are part of a mobile or traveling show or act may be kept, while the show or act is traveling from one temporary location to another, in transport containers that comply with all requirements of § 3.14 of this subpart other than the marking requirements in § 3.14(a)(6) of this subpart. When the show or act is not traveling, the cats must be placed in primary enclosures that meet the minimum requirements of this section.

(c) *Additional requirements for dogs.*—(1) *Space.* (i) Each dog housed in a primary enclosure (including weaned puppies) must be provided a minimum amount of floor space, calculated as follows: Find the mathematical square of the sum of the length of the dog in inches (measured from the tip of its nose to the base of its tail) plus 6 inches; then divide the product by 144. The calculation is: (length of dog in inches + 6) × (length of dog in inches + 6) = required floor space in square inches. Required floor space in inches/144 = required floor space in square feet.

(ii) Each bitch with nursing puppies must be provided with an additional amount of floor space, based on her breed and behavioral characteristics, and in accordance with generally accepted husbandry practices as determined by the attending veterinarian. If the additional amount of floor space for each nursing puppy is less than 5 percent of the minimum requirement for the bitch, such housing must be approved by the Committee in the case of a research facility, and, in the case of dealers and exhibitors, such housing must be approved by the Administrator.

(iii) The interior height of a primary enclosure must be at least 6 inches higher than the head of the tallest dog in the enclosure when it is in a normal standing position.

(2) *Dogs on tethers.* Dogs may be kept on tethers only in outside housing facilities that meet the requirements of § 3.4 of this subpart, and only when the tether meets the requirements of this paragraph. The tether must be attached to the front of the dog's shelter structure or to a post in front of the shelter structure and must be at least three times the length of the dog, as measured from the tip of its nose to the base of its

tail. The tether must allow the dog convenient access to the shelter structure and to food and water containers. The tether must be of the type and strength commonly used for the size dog involved and must be attached to the dog by a well-fitted collar that will not cause trauma or injury to the dog. Collars made of materials such as wire, flat chains, chains with sharp edges, or chains with rusty or nonuniform links are prohibited. The tether must be attached so that the dog cannot become entangled with other objects or come into physical contact with other dogs in the outside housing facility, and so the dog can roam to the full range of the tether. Dog housing areas where dogs are on tethers must be enclosed by a perimeter fence that is of sufficient height to keep unwanted animals out. Fences less than 6 feet high must be approved by the Administrator. The fence must be constructed so that it protects the dogs by preventing animals the size of dogs, skunks, and raccoons from going through it or under it and having contact with the dogs inside.

(3) *Compatibility.* All dogs housed in the same primary enclosure must be compatible, as determined by observation. Not more than 12 adult nonconditioned dogs may be housed in the same primary enclosure. Bitches in heat may not be housed in the same primary enclosure with sexually mature males, except for breeding. Except when maintained in breeding colonies, bitches with litters may not be housed in the same primary enclosure with other adult dogs, and puppies under 4 months of age may not be housed in the same primary enclosure with adult dogs, other than the dam. Dogs with a vicious or aggressive disposition must be housed separately.

(4) *Dogs in mobile or traveling shows or acts.* Dogs that are part of a mobile or traveling show or act may be kept, while the show or act is traveling from one temporary location to another, in transport containers that comply with all requirements of § 3.14 of this subpart other than the marking requirements in § 3.14(a)(6) of this subpart. When the show or act is not traveling, the dogs must be placed in primary enclosures that meet the minimum requirements of this section.

(d) Innovative primary enclosures not precisely meeting the floor area and height requirements provided in paragraphs (b)(1) and (c)(1) of this section, but that provide the dogs or cats with a sufficient volume of space and the opportunity to express species-typical behavior, may be used at research facilities when approved by the

Committee, and by dealers and exhibitors when approved by the Administrator.

Animal Health and Husbandry Standards

§ 3.7 Exercise and socialization for dogs.

(a) *Dogs housed individually.* Dogs over 12 weeks of age, except bitches with litters, housed, held, or maintained by any dealer, exhibitor, or research facility, including Federal research facilities, must be provided the opportunity for exercise regularly if they are kept individually in cages, pens, or runs that provide less than two times the required floor space for that dog, as indicated by § 3.6(c)(1) of this subpart. If only one dog is housed, held, or maintained at a facility, the single dog must receive positive physical contact with humans at least daily.

(b) *Dogs housed in groups.* Dogs over 12 weeks of age housed, held, or maintained in groups by any dealer, exhibitor, or research facility, including Federal research facilities, do not require additional opportunity for exercise regularly if they are maintained in cages, pens, or runs that provide at least 100 percent of the required space for each dog if maintained separately. Such animals may be maintained in compatible groups, unless:

(1) Housing in compatible groups is not in accordance with a research proposal and the proposal has been approved by the research facility Committee;

(2) In the opinion of the attending veterinarian, such housing would adversely affect the health or well-being of the dog(s); or

(3) Any dog exhibits aggressive or vicious behavior.

(c) *Methods and period of providing exercise opportunity.* (1) Exact method(s) and period(s) of providing the opportunity for exercise shall be determined by the attending veterinarian with, at research facilities, consultation and review by the Committee.

(2) The opportunity for exercise may be provided in a number of ways, such as:

(i) Group housing in cages, pens or runs that provide at least 100 percent of the required space for each dog if maintained separately under the minimum floor space requirements of § 3.6(c)(1) of this subpart;

(ii) Maintaining individually housed dogs in cages, pens, or runs that provide at least twice the minimum floor space required by § 3.6(c)(1) of this subpart;

(iii) Providing access to a run or open area;

(iv) Providing positive physical contact with humans through play, grooming, petting, walking on a leash; or

(v) Other similar activities.

(3) Forced exercise methods or devices such as swimming, treadmills, or carousel-type devices are unacceptable for meeting the exercise requirements of this section.

(4) Written standard procedures for provision of the opportunity for exercise must be prepared by the dealer, exhibitor, or research facility, and must be made available to APHIS and, in the case of research facilities, to official of any pertinent funding Federal agency.

(d) *Exemptions.* (1) If, in the opinion of the attending veterinarian, it is inappropriate for certain dogs to exercise because of their health, condition, or well-being, the dealer, exhibitor, or research facility may be exempted from meeting the requirements of this section for those dogs. Such exemption must be documented by the attending veterinarian and, unless the basis for exemption is a permanent condition, must be reviewed at least every 30 days by the attending veterinarian.

(2) A research facility may be exempted from the requirements of this section if the principal investigator determines for scientific reasons set forth in the research proposal that it is inappropriate for certain dogs to exercise. Such exemption must be documented in the Committee-approved proposal and must be reviewed at appropriate intervals, as determined by the Committee, but not less than annually.

(3) Records of any exemptions must be maintained and made available to USDA officials or any pertinent funding Federal agency upon request.

§ 3.8 Feeding.

(a) Dogs and cats must be fed at least once each day, except as otherwise might be required to provide adequate veterinary care. The food must be uncontaminated, wholesome, palatable, and of sufficient quantity and nutritive value to maintain the normal condition and weight of the animal. The diet must be appropriate for the individual animal's age and condition.

(b) Food receptacles must be used for dogs and cats, must be readily accessible to all dogs and cats, and must be located so as to minimize contamination by excreta and pests, and be protected from rain and snow. Feeding pans must either be made of a durable material that can be easily cleaned and sanitized or be disposable. If the food receptacles are not

disposable, they must be kept clean and must be sanitized in accordance with § 3.10(b) of this subpart. Sanitization is achieved by using one of the methods described in § 3.10(b)(3) of this subpart. If the food receptacles are disposable, they must be discarded after one use. Self-feeders may be used for the feeding of dry food. If self-feeders are used, they must be kept clean and must be sanitized in accordance with § 3.10(b) of this subpart. Measures must be taken to ensure there is no molding, deterioration, and caking of feed.

§ 3.9 Watering.

If potable water is not continually available to the dogs and cats, it must be offered to the dogs and cats at least twice daily for periods of at least 1 hour each time, unless restricted by the attending veterinarian. Water receptacles must be cleaned and sanitized in accordance with § 3.10(b) of this subpart, and before being used to water a different dog or cat or social grouping of dogs or cats.

§ 3.10 Cleaning, sanitization, housekeeping, and pest control.

(a) *Cleaning of primary enclosures.* Excreta and food waste must be removed from primary enclosures daily, and from under primary enclosures as often as necessary to prevent an excessive accumulation of feces and food waste, to prevent soiling of the dogs or cats contained in the primary enclosures, and to reduce disease hazards, insects, pests and odors. When using water to clean the primary enclosure, whether by hosing, flushing, or other methods, a stream of water must not be directed at a dog or cat. When stream is used to clean the primary enclosure, dogs and cats must be removed or adequately protected to prevent them from being injured. Standing water must be removed from the primary enclosure and animals in other primary enclosures must be protected from being contaminated with water and other wastes during the cleaning. The pans under primary enclosures with grill-type floors and the ground areas under raised runs with wire or slatted floors must be cleaned as often as necessary to prevent accumulation of feces and food waste and to reduce disease hazards, pests, insects and odors.

(b) *Sanitization of primary enclosures and food and water receptacles.* (1) Used primary enclosures and food and water receptacles must be cleaned and sanitized in accordance with this section before they can be used to house, feed, or water another dog or cat, or social grouping of dogs or cats.

(2) Used primary enclosures and food and water receptacles for dogs and cats must be sanitized at least once every 2 weeks using one of the methods prescribed in paragraph (b)(3) of this section, and more often if necessary to prevent an accumulation of dirt, debris, food waste, excreta, and other disease hazards.

(3) Hard surfaces of primary enclosures and food and water receptacles must be sanitized using one of the following methods:

- (i) Live steam under pressure;
- (ii) Washing with hot water (at least 180 °F (82.2 °C)) and soap or detergent, as with a mechanical cage washer; or
- (iii) Washing all soiled surfaces with appropriate detergent solutions and disinfectants, or by using a combination detergent/disinfectant product that accomplishes the same purpose, with a thorough cleaning of the surfaces to remove organic material, so as to remove all organic material and mineral buildup, and to provide sanitization followed by a clean water rinse.

(4) Pens, runs, and outdoor housing areas using material that cannot be sanitized using the methods provided in paragraph (b)(3) of this section, such as gravel, sand, grass, earth, or absorbent bedding, must be sanitized by removing the contaminated material as necessary to prevent odors, diseases, pests, insects, and vermin infestation.

(c) *Housekeeping for premises.* Premises where housing facilities are located, including buildings and surrounding grounds, must be kept clean and in good repair to protect the animals from injury, to facilitate the husbandry practices required in this subpart, and to reduce or eliminate breeding and living areas for rodents and other pests and vermin. Premises must be kept free of accumulation of trash, junk, waste products, and discarded matter. Weeds, grasses, and bushes must be controlled as to facilitate cleaning of the premises and pest control, and to protect the health and well-being of the animals.

(d) *Pest control.* An effective program for the control of insects, external parasites affecting dogs and cats, and birds and mammals that are pests, must be established and maintained so as to promote the health and well-being of the animals and reduce contamination by pests in animal areas.

§ 3.11 Employees.

Each person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) maintaining dogs and cats must have enough employees to carry out the level of the husbandry practices and care required in this subpart. The employees who provide for husbandry

and care, or handle animals, must be supervised by an individual who has the knowledge, background, and experience in proper husbandry and care of dogs and cats to supervise others. The employer must be certain that the supervisor and other employees can perform to these standards.

§ 3.12 Social grouping.

Dogs and cats that are housed in the same primary enclosure must be compatible, with the following restrictions:

(a) Females in heat (estrus) may not be housed in the same primary enclosure with males, except for breeding purposes;

(b) Any dog or cat exhibiting a vicious or overly aggressive disposition must be housed separately;

(c) Puppies or kittens 4 months of age or less may not be housed in the same primary enclosure with adult dogs or cats other than their dams, except when permanently maintained in breeding colonies;

(d) Dogs or cats may not be housed in the same primary enclosure with any other species of animals, unless they are compatible; and

(e) Dogs and cats that have or are suspected of having a contagious disease must be isolated from healthy animals in the colony, as directed by the attending veterinarian. When an entire group or room of dogs and cats is known to have or believed to be exposed to an infectious agent, the group may be kept intact during the process of diagnosis, treatment, and control.

Transportation Standards

§ 3.13 Consignments to carriers and intermediate handlers.

(a) Carriers and intermediate handlers must not accept a dog or cat for transport in commerce more than 4 hours before the scheduled departure time of the primary conveyance on which the animal is to be transported. However, a carrier or intermediate handler may agree with anyone consigning a dog or cat to extend this time by up to 2 hours.

(b) Carriers and intermediate handlers must not accept a dog or cat for transport in commerce unless they are provided with the name, address, and telephone number of the consignee.

(c) Carriers and intermediate handlers must not accept a dog or cat for transport in commerce unless written instructions concerning in-transit food and water requirements for each dog and cat in the shipment are securely attached to the outside of its primary

enclosure in a manner that makes them easily noticed and read.

(d) Carriers and intermediate handlers must not accept a dog or cat for transport in commerce unless the consignor certifies in writing to the carrier or intermediate handler the following information for each enclosure; a copy of the certification must accompany the dog or cat to its destination:

(1) The consignor's name and address;

(2) The tag number or tattoo assigned to each dog or cat under §§ 2.38 and 2.50 of the regulations;

(3) A statement by the consignor certifying that each dog or cat contained in the primary enclosure was offered food within 12 hours and water within 4 hours before delivery to the carrier or intermediate handler, and the date and time food and water was last offered; and

(4) The consignor's signature and the date and time the certification was signed.

(e) Carriers and intermediate handlers must not accept a dog or cat for transport in commerce in a primary enclosure unless the primary enclosure meets the requirements of § 3.14 of this subpart, or the consignor certifies in writing to the carrier or intermediate handler that the primary enclosure meets the requirements of § 3.14 of this subpart. Even if the consignor provides this certification, a carrier or intermediate handler must not accept a dog or cat for transport if the primary enclosure is obviously defective or damaged and cannot reasonably be expected to safely and comfortably contain the dog or cat without causing suffering or injury. A copy of the certification must accompany the dog or cat to its destination and must include the following information for each primary enclosure:

(1) The consignor's name and address;

(2) The tag number or tattoo assigned to each dog or cat under §§ 2.38 and 2.50 of this chapter;

(3) A statement by the consignor certifying that each primary enclosure in the shipment meets the standards for primary enclosures in § 3.14 of this subpart; and

(4) The consignor's signature and the date the certification was signed.

(f) Carriers and intermediate handlers must not accept a dog or cat for transport in commerce unless their holding area and cargo facilities meet the minimum temperature requirements provided in §§ 3.18 and 3.19 of this subpart, or unless the consignor provides them with a certificate signed by a veterinarian and dated no more than 10 days before delivery of the

animal to the carrier or intermediate handler for transport in commerce, certifying that the animal is acclimated to temperatures lower than those required in §§ 3.18 and 3.19 of this subpart. Even if the carrier or intermediate handler receives this certification, the temperatures the dog or cat is exposed to while in the carrier's or intermediate handler's custody must not be lower than 35 °F (1.7 °C). A copy of the certification must accompany the dog or cat to its destination and must include the following information:

(1) The consignor's name and address;

(2) The tag number or tattoo assigned to each dog or cat under §§ 2.38 and 2.50 of this chapter;

(3) A statement by a veterinarian, dated no more than 10 days before delivery, that to the best of his or her knowledge, each of the dogs or cats contained in the primary enclosure is acclimated to air temperatures lower than 45 °F (7.2 °C); but not lower than a minimum temperature, specified on a certificate, that the attending veterinarian has determined is based on generally accepted temperature standards for the age, condition, and breed of the dog or cat; and

(4) The signature of the veterinarian and the date the certification was signed.

(g) When a primary enclosure containing a dog or cat has arrived at the animal holding area at a terminal facility after transport, the carrier or intermediate handler must attempt to notify the consignee upon arrival and at least once in every 6-hour period thereafter. The time, date, and method of each attempted notification and the actual notification of the consignee, and the name of the person who notifies or attempts to notify the consignee must be written on the carrier's or intermediate handler's copy of the shipping document and on the copy that accompanies the primary enclosure. If the consignee cannot be notified within 24 hours after the dog or cat has arrived at the terminal facility, the carrier or intermediate handler must return the animal to the consignor or to whomever the consignor designates. If the consignee is notified of the arrival and does not accept delivery of the dog or cat within 48 hours after arrival of the dog or cat, the carrier or intermediate handler must return the animal to the consignor or to whomever the consignor designates. The carrier or intermediate handler must continue to provide proper care, feeding, and housing to the dog or cat, and maintain the dog or cat in accordance with generally accepted professional and husbandry practices until the consignee accepts delivery of

the dog or cat or until it is returned to the consignor or to whomever the consignor designates. The carrier or intermediate handler must obligate the consignor to reimburse the carrier or intermediate handler for the cost of return transportation and care.

§ 3.14 Primary enclosures used to transport live dogs and cats.

Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must not transport or deliver for transport in commerce a dog or cat unless the following requirements are met:

(a) *Construction of primary enclosures.* The dog or cat must be contained in a primary enclosure such as a compartment, transport cage, carton, or crate. Primary enclosures used to transport dogs and cats must be constructed so that:

(1) The primary enclosure is strong enough to contain the dogs and cats securely and comfortably and to withstand the normal rigors of transportation;

(2) The interior of the primary enclosure has no sharp points or edges and no protrusions that could injure the animal contained in it;

(3) The dog or cat is at all times securely contained within the enclosure and cannot put any part of its body outside the enclosure in a way that could result in injury to itself, to handlers, or to persons or animals nearby;

(4) The dog or cat can be easily and quickly removed from the enclosure in an emergency;

(5) Unless the enclosure is permanently affixed to the conveyance, adequate devices such as handles or handholds are provided on its exterior, and enable the enclosure to be lifted without tilting it, and ensure that anyone handling the enclosure will not come into physical contact with the animal contained inside;

(6) Unless the enclosure is permanently affixed to the conveyance, it is clearly marked on top and on one or more sides with the words "Live Animals," in letters at least 1 inch (2.5 cm.) high, and with arrows or other markings to indicate the correct upright position of the primary enclosure;

(7) Any material, treatment, paint, preservative, or other chemical used in or on the enclosure is nontoxic to the animal and not harmful to the health or well-being of the animal;

(8) Proper ventilation is provided to the animal in accordance with paragraph (c) of this section; and

(9) The primary enclosure has a solid, leak-proof bottom or a removable, leak-proof collection tray under a slatted or wire mesh floor that prevents seepage of waste products, such as excreta and body fluids, outside of the enclosure. If a slatted or wire mesh floor is used in the enclosure, it must be designed and constructed so that the animal cannot put any part of its body between the slats or through the holes in the mesh. Unless the dogs and cats are on raised slatted floors or raised floors made of wire mesh, the primary enclosure must contain enough previously unused litter to absorb and cover excreta. The litter must be of a suitably absorbent material that is safe and nontoxic to the dogs and cats.

(b) *Cleaning of primary enclosures.* A primary enclosure used to hold or transport dogs or cats in commerce must be cleaned and sanitized before each use in accordance with the methods provided in § 3.10(b)(3) of this subpart. If the dogs or cats are in transit for more than 24 hours, the enclosures must be cleaned and any litter replaced, or other methods, such as moving the animals to another enclosure, must be utilized to prevent the soiling of the dogs or cats by body wastes. If it becomes necessary to remove the dog or cat from the enclosure in order to clean, or to move the dog or cat to another enclosure, this procedure must be completed in a way that safeguards the dog or cat from injury and prevents escape.

(c) *Ventilation.* (1) Unless the primary enclosure is permanently affixed to the conveyance, there must be:

(i) Ventilation openings located on two opposing walls of the primary enclosure and the openings must be at least 16 percent of the surface area of each such wall, and the total combined surface area of the ventilation openings must be at least 14 percent of the total combined surface area of all the walls of the primary enclosure; or

(ii) Ventilation openings on three walls of the primary enclosure, and the openings on each of the two opposing walls must be at least 8 percent of the total surface area of the two walls, and the ventilation openings on the third wall of the primary enclosure must be at least 50 percent of the total surface area of that wall, and the total combined surface area of the ventilation openings must be at least 14 percent of the total combined surface area of all the walls of the primary enclosure; or

(iii) Ventilation openings located on all four walls of the primary enclosure and the ventilation openings on each of the four walls must be at least 8 percent of the total surface area of each such wall, and the total combined surface

area of the openings must be at least 14 percent of total combined surface area of all the walls of the primary enclosure; and

(iv) At least one-third of the ventilation area must be located on the upper half of the primary enclosure.

(2) Unless the primary enclosure is permanently affixed to the conveyance, projecting rims or similar devices must be located on the exterior of each enclosure wall having a ventilation opening, in order to prevent obstruction of the openings. The projecting rims or similar devices must be large enough to provide a minimum air circulation space of 0.75 in. (1.9 cm) between the primary enclosure and anything the enclosure is placed against.

(3) If a primary enclosure is permanently affixed to the primary conveyance so that there is only a front ventilation opening for the enclosure, the primary enclosure must be affixed to the primary conveyance in such a way that the front ventilation opening cannot be blocked, and the front ventilation opening must open directly to an unobstructed aisle or passageway inside the conveyance. The ventilation opening must be at least 90 percent of the total area of the front wall of the enclosure, and must be covered with bars, wire mesh, or smooth expanded metal having air spaces.

(d) *Compatibility.* (1) Live dogs or cats transported in the same primary enclosure must be of the same species and be maintained in compatible groups, except that dogs and cats that are private pets, are of comparable size, and are compatible, may be transported in the same primary enclosure.

(2) Puppies or kittens 4 months of age or less may not be transported in the same primary enclosure with adult dogs or cats other than their dams.

(3) Dogs or cats that are overly aggressive or exhibit a vicious disposition must be transported individually in a primary enclosure.

(4) Any female dog or cat in heat (estrus) may not be transported in the same primary enclosure with any male dog or cat.

(e) *Space and placement.* (1) Primary enclosures used to transport live dogs and cats must be large enough to ensure that each animal contained in the primary enclosure has enough space to turn about normally while standing, to stand and sit erect, and to lie in a natural position.

(2) Primary enclosures used to transport dogs and cats must be positioned in the primary conveyance so as to provide protection from the elements.

(f) *Transportation by air.* (1) No more than one live dog or cat, 4 months of age or older, may be transported in the same primary enclosure when shipped via air carrier.

(2) No more than one live puppy, 8 weeks to 4 months of age, and weighing over 20 lbs (9 kg), may be transported in a primary enclosure when shipped via air carrier.

(3) No more than two live puppies or kittens, 8 weeks to 4 months of age, that are of comparable size, and weighing 20 lbs (9 kg) or less each, may be transported in the same primary enclosure when shipped via air carrier.

(4) Weaned live puppies or kittens less than 8 weeks of age and of comparable size, or puppies or kittens that are less than 8 weeks of age that are littermates and are accompanied by their dam, may be transported in the same primary enclosure when shipped to research facilities, including Federal research facilities.

(g) *Transportation by surface vehicle.* (1) No more than four live dogs or cats, 8 weeks of age or older, that are of comparable size, may be transported in the same primary enclosure when shipped by surface vehicle (including ground and water transportation) and only if all other requirements of this section are met.

(2) Weaned live puppies or kittens less than 8 weeks of age and of comparable size, or puppies or kittens that are less than 8 weeks of age that are littermates and are accompanied by their dam, may be transported in the same primary enclosure when shipped to research facilities, including Federal research facilities, and only if all other requirements in this section are met.

(h) *Accompanying documents and records.* Shipping documents that must accompany shipments of dogs and cats may be held by the operator of the primary conveyance, for surface transportation only, or must be securely attached in a readily accessible manner to the outside of any primary enclosure that is part of the shipment, in a manner that allows them to be detached for examination and securely reattached, such as in a pocket or sleeve. Instructions for food and water and for administration of drugs, medication, and other special care must be attached to each primary enclosure in a manner that makes them easy to notice, to detach for examination, and to reattach securely.

§ 3.15 Primary conveyances (motor vehicle, rail, air, and marine).

(a) The animal cargo space of primary conveyances used to transport dogs and cats must be designed, constructed, and

maintained in a manner that at all times protects the health and well-being of the animals transported in them, ensures their safety and comfort, and prevents the entry of engine exhaust from the primary conveyance during transportation.

(b) The animal cargo space must have a supply of air that is sufficient for the normal breathing of all the animals being transported in it.

(c) Each primary enclosure containing dogs or cats must be positioned in the animal cargo space in a manner that provides protection from the elements and that allows each dog or cat enough air for normal breathing.

(d) During air transportation, including time spent on the ground, dogs and cats must be held or transported in cargo areas that are heated or cooled as necessary to maintain an ambient temperature that ensures the health and well-being of the dogs or cats. The cargo areas must be pressurized when the primary conveyance used for air transportation is not on the ground, unless flying under 8,000 ft. Dogs and cats must have adequate air for breathing at all times when being transported.

(e) During surface transportation, auxiliary ventilation, such as fans, blowers or air conditioning, must be used in any animal cargo space containing live dogs or cats when the ambient temperature within the animal cargo space reaches 85 °F (29.5 °C). Moreover, the ambient temperature may not exceed 95 °F (35 °C) at any time; nor exceed 85 °F (29.5 °C) for a period of more than 4 hours; nor fall below 45 °F (7.2 °C) for a period of more than 4 hours; nor fall below 35 °F (1.7 °C) at any time.

(f) Primary enclosures must be positioned in the primary conveyance in a manner that allows the dogs and cats to be quickly and easily removed from the primary conveyance in an emergency.

(g) The interior of the animal cargo space must be kept clean.

(h) Live dogs and cats may not be transported with any material, substance (e.g., dry ice) or device in a manner that may reasonably be expected to harm the dogs and cats or cause inhumane conditions.

§ 3.16 Food and water requirements.

(a) Each dog and cat that is 16 weeks of age or more must be offered food at least once every 24 hours. Puppies and kittens less than 16 weeks of age must be offered food at least once every 12 hours. These time periods apply to dealers, exhibitors, research facilities, including Federal research facilities,

who transport dogs and cats in their own primary conveyance, starting from the time the dog or cat was last offered food before transportation was begun. These time periods apply to carriers and intermediate handlers starting from the date and time stated on the certificate provided under § 3.13(d) of this subpart. Each dog or cat must be offered food within 12 hours before being transported in commerce. Consignors who are subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must certify that each dog and cat was offered food within the 12 hours preceding delivery of the dog or cat to a carrier or intermediate handler for transportation in commerce, and must certify the date and time of the feeding, in accordance with § 3.13(d) of this subpart.

(b) Each dog and cat must be offered potable water during the 4 hours immediately preceding the beginning of its transportation in commerce and at least once every 12 hours thereafter. This time period applies to dealers, exhibitors, and research facilities, including Federal research facilities, who transport dogs and cats in their own primary conveyance, starting from the time the dog or cat was last offered potable water before being transported in commerce. This time period applies to carriers and intermediate handlers starting from the date and time stated on the certificate provided under § 3.13(d) of this subpart. Consignors who are subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must certify that each dog and cat was offered potable water within 4 hours before being transported in commerce, and must certify the date and time the water was offered, in accordance with § 3.13(d) of this subpart.

(c) Any dealer, research facility, including a Federal research facility, or exhibitor offering any dog or cat to a carrier or intermediate handler for transportation in commerce must securely attach to the outside of the primary enclosure used for transporting the dog or cat, written instructions for the in-transit food and water requirements for the dogs and cats contained in the enclosure. The instructions must be attached in a manner that makes them easily noticed, detached and returned to the enclosure.

(d) Food and water receptacles must be securely attached inside the primary enclosure and placed so that the receptacles can be filled from outside the enclosure without opening the door. Food and water containers must be designed, constructed, and installed so that a dog or cat cannot leave the

primary enclosure through the food or water opening.

§ 3.17 Care in transit.

(a) *Surface transportation (ground and water).* Any person subject to the Animal Welfare regulations transporting dogs or cats in commerce must ensure that the operator of the conveyance, or a person accompanying the operator, observes the dogs or cats as often as circumstance allow, but not less than once every 4 hours, to make sure they have sufficient air for normal breathing, that the ambient temperature is within the limits provided in § 3.15(e), and that all applicable standards of this subpart are being complied with. The regulated person must ensure that the operator or person accompanying the operator determines whether any of the dogs or cats are in obvious physical distress and obtains any veterinary care needed for the dogs or cats at the closest available veterinary facility.

(b) *Air transportation.* During air transportation of dogs or cats, it is the responsibility of the carrier to observe the dogs or cats as frequently as circumstance allow, but not less than once every 4 hours if the animal cargo area is accessible during flight. If the animal cargo area is not accessible during flight, the carrier must observe the dogs or cats whenever they are loaded and unloaded and whenever the animal cargo space is otherwise accessible to make sure they have sufficient air for normal breathing, that the animal cargo area meets the heating and cooling requirements of § 3.15(d), and that all other applicable standards of this subpart are being complied with. The carrier must determine whether any of the dogs or cats are in obvious physical distress, and arrange for any needed veterinary care as soon as possible.

(c) If a dog or cat is obviously ill, injured, or in physical distress, it must not be transported in commerce, except to receive veterinary care for the condition.

(d) Except during the cleaning of primary enclosures, as required in § 3.14(b) of this subpart, during transportation in commerce a dog or cat must not be removed from its primary enclosure, unless it is placed in another primary enclosure or facility that meets the requirements of § 3.6 or § 3.14 of this subpart.

(e) The transportation regulations contained in this subpart must be complied with until a consignee takes physical delivery of the dog or cat if the animal is consigned for transportation.

or until the animal is returned to the consignor.

§ 3.18 Terminal facilities.

(a) *Placement.* Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must not commingle shipments of dogs or cats with inanimate cargo in animal holding areas of terminal facilities.

(b) *Cleaning, sanitization, and pest control.* All animal holding areas of terminal facilities must be cleaned and sanitized in a manner prescribed in § 3.10(b)(3) of this subpart, as often as necessary to prevent an accumulation of debris or excreta and to minimize vermin infestation and disease hazards. Terminal facilities must follow an effective program in all animal holding areas for the control of insects, ectoparasites, and birds and mammals that are pests to dogs and cats.

(c) *Ventilation.* Ventilation must be provided in any animal holding area in a terminal facility containing dogs or cats, by means of windows, doors, vents, or air conditioning. The air must be circulated by fans, blowers, or air conditioning so as to minimize drafts, odors, and moisture condensation. Auxiliary ventilation, such as exhaust fans, vents, fans, blowers, or air conditioning must be used in any animal holding area containing dogs and cats, when the ambient temperature is 75 °F (23.9 °C) or higher.

(d) *Temperature.* The ambient temperature in an animal holding area containing dogs or cats must not fall below 45 °F (7.2 °C) or rise above 75 °F (23.9 °C) for more than four consecutive hours at any time dogs or cats are present. The ambient temperature must not fall below 35 °F (1.7 °C) or rise above 85 °F (29.5 °C) at any time dogs or cats are present. The ambient temperature must be measured in the animal holding area by the carrier, intermediate handler, or a person transporting dogs or cats who is subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3), outside any primary enclosure containing a dog or cat at a point not more than 3 feet (0.91 m) away from an outside wall of the primary enclosure, and approximately midway up the side of the enclosure.

(e) *Shelter.* Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) holding a live dog or cat in an animal holding area of a terminal facility must provide the following:

(1) *Shelter from sunlight and extreme heat.* Shade must be provided that is sufficient to protect the dog or cat from the direct rays of the sun.

(2) *Shelter from rain or snow.* Sufficient protection must be provided to allow the dogs or cats to remain dry during rain, snow, and other precipitation.

(f) *Duration.* The length of time any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) can hold dogs or cats in animal holding areas of terminal facilities upon arrival is the time as that provided in § 3.13(g) of this subpart.

§ 3.19 Handling.

(a) Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) who moves (including loading or unloading) dogs or cats within, to, or from the animal holding area of a terminal facility or a primary conveyance must do so as quickly and efficiently as possible and must provide the following during movement of the dog or cat:

(1) *Shelter from sunlight and extreme heat.* Sufficient shade must be provided to protect the dog or cat from the direct rays of the sun. The dog or cat must not be exposed to an ambient air temperature above 85 °F (29.5 °C) for a period of more than 45 minutes while being moved to or from a primary conveyance or a terminal facility. The temperature must be measured in the manner provided in § 3.18(d) of this subpart.

(2) *Shelter from rain and snow.* Sufficient protection must be provided to allow the dogs and cats to remain dry during rain, snow, and other precipitation.

(3) *Shelter from cold temperatures.* Transporting devices on which live dogs or cats are placed to move them must be covered to protect the animals when the outdoor temperature falls below 50 °F (10 °C). The dogs or cats must not be exposed to an ambient temperature below 45 °F (7.2 °C) for a period of more than 45 minutes, unless they are accompanied by a certificate of acclimation to lower temperatures as provided in § 3.13(f). The temperature must be measured in the manner provided in § 3.18(d) of this subpart.

(b) Any person handling a primary enclosure containing a dog or cat must use care and must avoid causing physical harm or emotional distress to the dog or cat.

(1) A primary enclosure containing a live dog or cat must not be placed on unattended conveyor belts, or on elevated conveyor belts, such as baggage claim conveyor belts and inclined conveyor ramps that lead to baggage claim areas, at any time; except that a primary enclosure may be placed on inclined conveyor ramps used to load

and unload aircraft if an attendant is present at each end of the conveyor belt.

(2) A primary enclosure containing a dog or cat must not be tossed, dropped, or needlessly tilted, and must not be stacked in a manner that may reasonably be expected to result in its falling. It must be handled and positioned in the manner that written instructions and arrows on the outside of the primary enclosure indicate.

(c) This section applies to movement of a dog or cat from primary conveyance to primary conveyance, within a primary conveyance or terminal facility, and to or from a terminal facility or a primary conveyance.

3. Subpart D would be revised to read as follows:

Subpart D—Specifications for the Humane Handling, Care, Treatment, and Transportation of Nonhuman Primates Facilities and Operating Standards

- Sec.
3.75 Housing facilities, general.
3.76 Indoor housing facilities.
3.77 Sheltered housing facilities.
3.78 Outdoor housing facilities.
3.79 Mobile or traveling housing facilities.
3.80 Primary enclosures.
3.81 Environment enhancement to promote psychological well-being.

Animal Health and Husbandry Standards

- 3.82 Feeding.
3.83 Watering.
3.84 Cleaning, sanitization, housekeeping, and pest control.
3.85 Employees.

Transportation Standards

- 3.86 Consignments to carriers and intermediate handlers.
3.87 Primary enclosures used to transport nonhuman primates.
3.88 Primary conveyances (motor vehicles, rail, air, and marine).
3.89 Food and water requirements.
3.90 Care in transit.
3.91 Terminal facilities.
3.92 Handling.

Subpart D—Specifications for the Humane Handling, Care, Treatment, and Transportation of Nonhuman Primates¹

Facilities and Operating Standards

§ 3.75 Housing facilities, general.

(a) *Structure; construction.* Housing facilities for nonhuman primates must

¹ Nonhuman primates include a great diversity of forms, ranging from the marmoset weighing only a few ounces, to the adult gorilla weighing hundreds of pounds, and include more than 240 species. They come from Asia, Africa, and Central and South America, and they live in different habitats in nature. Some have been transported to the United

be designed and constructed so that they are structurally sound for the species of nonhuman primates housed in them. They must be kept in good repair, and they must protect the animals from injury, contain the animals securely, and restrict other animals and unauthorized humans from entering.

(b) *Condition and site.* Housing facilities and areas used for storing animal food or bedding must be free of any accumulation of trash, waste material, junk, weeds, and other discarded materials. Animal areas inside of housing facilities must be kept neat and free of clutter, including equipment, furniture, or stored material, but may contain materials actually used and necessary for cleaning the area, and fixtures and equipment necessary for proper husbandry practices and research needs. Housing facilities other than those maintained by research facilities and Federal research facilities must be physically separated from any other businesses. If a housing facility is located on the same premises as any other businesses, it must be physically separated from the other businesses so that unauthorized humans, and animals the size of dogs, skunks, and raccoons, are prevented from entering it.

(c) *Surfaces.*—(1) *General requirements.* The surfaces of housing facilities—including perches, shelves, swings, boxes, houses, dens, and other furniture-type fixtures or objects within the facility—must be constructed in a manner and made of materials that allow them to be readily cleaned and sanitized, or removed or replaced when worn or soiled. Furniture-type fixtures or objects must be sturdy constructed and must be strong enough to provide for the safe activity and welfare of nonhuman primates. Floors may be made of dirt, absorbent bedding, sand, gravel, grass, or other similar material that can be readily cleaned, or can be removed or replaced whenever cleaning does not eliminate odors, diseases, pests, insects, or vermin. Any surfaces that come in contact with nonhuman primates must:

(i) Be free of excessive rust that prevents the required cleaning and

sanitization, or that affects the structural strength of the surface; and

(ii) Be free of jagged edges or sharp points that might injure the animals.

(2) *Maintenance and replacement of surfaces.* All surfaces must be maintained on a regular basis. Surfaces of housing facilities—including houses, dens, and other furniture-type fixtures and objects within the facility—that cannot be readily cleaned and sanitized, must be replaced when worn or soiled.

(3) *Cleaning.* Hard surfaces with which nonhuman primates come in contact must be spot-cleaned daily and sanitized in accordance with § 3.84 of this subpart to prevent any accumulation of excreta or disease hazards, unless the species housed in the facility engage in scent marking. If the species scent mark, the surfaces must be sanitized or replaced at regular intervals as determined by the attending veterinarian in accordance with generally accepted professional and husbandry practices. Floors made of dirt, absorbent bedding, sand, gravel, grass, or other similar material, and planted enclosures must be raked or spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta. Contaminated material must be removed or replaced whenever raking and spot cleaning does not eliminate odors, diseases, insects, pests, or vermin infestation. All other surfaces of housing facilities must be cleaned and sanitized when necessary to satisfy generally accepted husbandry standards and practices. Sanitization may be done by any of the methods provided in § 3.84(b)(3) of this subpart for primary enclosures.

(d) *Water and electric power.* The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting, and for carrying out other husbandry requirements in accordance with the regulations in this subpart. The housing facility must provide running potable water for the nonhuman primates' drinking needs. It must be adequate for cleaning and for carrying out other husbandry requirements.

(e) *Storage.* Supplies of food and bedding must be stored in a manner that protects the supplies from spoilage, contamination, and vermin infestation. The supplies must be stored off the floor and away from the walls, to allow cleaning underneath and around the supplies. Food requiring refrigeration must be stored accordingly, and all food must be stored in a manner that prevents contamination and deterioration of its nutritive value. Only the food and bedding currently being

used may be kept in animal areas, and when not in actual use, open food and bedding supplies must be kept in leakproof containers with tightly fitting lids to prevent spoilage and contamination. Substances that are toxic to the nonhuman primates must not be stored in food storage and preparation areas, but may be stored in cabinets in the animal areas.

(f) *Drainage and waste disposal.* Housing facility operators must provide for regular and frequent collection, removal, and disposal of animal and food wastes, bedding, dead animals, debris, garbage, water, and any other fluids and wastes, in a manner that minimizes contamination and disease risk. Housing facilities must be equipped with disposal facilities and drainage systems that are constructed and operated so that animal wastes and water are rapidly eliminated and the animals stay dry. Disposal and drainage systems must minimize vermin and pest infestation, insects, odors and disease hazards. All drains must be properly constructed, installed, and maintained. If closed drainage systems are used, they must be equipped with traps and prevent the backflow of gases and the backup of sewage onto the floor. If the facility uses sump ponds, settlement ponds, or other similar systems for drainage and animal waste disposal, the system must be located far enough away from the animal area of the housing facility to prevent odors, diseases, insects, pests, and vermin infestation. If drip or constant flow watering devices are used to provide water to the animals, excess water must be rapidly drained out of the animal areas by gutters or pipes so that the animals stay dry. Standing puddles of water in animal areas must be mopped up or drained so that the animals remain dry. Trash containers in housing facilities and in food storage and food preparation areas must be leakproof and must have tightly fitted lids on them at all times. Dead animals, animal parts, and animal waste must not be kept in food storage or food preparation areas, food freezers, food refrigerators, and animal areas.

(g) *Washrooms and sinks.* Washing facilities, such as washrooms, basins, sinks, or showers must be provided for animal caretakers and must be readily accessible.

§ 3.76 Indoor housing facilities.

(a) *Heating, cooling, and temperature.* Indoor housing facilities must be sufficiently heated and cooled when necessary to protect nonhuman primates from temperature extremes and to provide for their health and well-being. The ambient temperature in the facility

States from their natural habitats and some have been raised in captivity in the United States. Their nutritional and activity requirements differ, as do their social and environmental requirements. As a result, the conditions appropriate for one species do not necessarily apply to another. Accordingly, these minimum specifications must be applied in accordance with the customary and generally accepted professional and husbandry practices considered appropriate for each species, and necessary to promote their psychological well-being.

These minimum standards apply only to live nonhuman primates, unless stated otherwise.

must not fall below 45° F (7.2° C) and must not rise above 95° F (35° C) when nonhuman primates are present. The ambient temperature must be maintained at a level that ensures the health and well-being of the species housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

(b) *Ventilation.* Indoor housing facilities must be sufficiently ventilated at all times when nonhuman primates are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, door, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning, must be provided when the ambient temperature is 85° F (29.5° C) or higher. The relative humidity maintained must be at a level that ensures the health and well-being of the animals housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

(c) *Lighting.* Indoor housing facilities must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the nonhuman primates. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed in the housing facility so as to protect the nonhuman primates from excessive light.

§ 3.77 Sheltered housing facilities.

(a) *Heating, cooling, and temperature.* The sheltered part of sheltered housing facilities must be sufficiently heated and cooled when necessary to protect the nonhuman primates from temperature extremes, and to provide for their health and well-being. The ambient temperature in the sheltered part of the facility must not fall below 45° F (7.2° C) and must not rise above 95° F (35° C) when nonhuman primates are present. The ambient temperature must be maintained at a level that ensures the health and well-being of the species housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

(b) *Ventilation.* The sheltered part of sheltered animal facilities must be sufficiently ventilated at all times to

provide for the health and well-being of nonhuman primates and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, doors, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning, must be provided when the ambient temperature is 85° F (29.5° C) or higher. The relative humidity maintained must be at a level that ensures the health and well-being of the species housed, as directed by the attending veterinarian, in accordance with generally accepted professional and husbandry practices.

(c) *Lighting.* The sheltered part of sheltered housing facilities must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the nonhuman primates. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed in the housing facility so as to protect the nonhuman primates from excessive light.

(d) *Shelter from the elements.* Sheltered housing facilities for nonhuman primates must provide adequate shelter from the elements at all times. They must provide protection from the sun, rain, snow, wind, and cold, and from any weather conditions that may occur.

(e) *Capacity; multiple shelters.* Both the sheltered part of sheltered housing facilities and any other necessary shelter from the elements must be sufficiently large to provide protection comfortably to each nonhuman primate housed in the facility. If aggressive or dominant animals are housed in the facility with other animals there, must be multiple shelters or other means to ensure that each nonhuman primate has access to shelter.

(f) *Perimeter fence.* The outdoor area of a sheltered housing facility must be enclosed by a fence that is of sufficient height to keep unwanted species out. Fences less than 6 feet high must be approved by the Administrator. The fence must be constructed so that it protects nonhuman primates by preventing unauthorized humans, and animals the size of dogs, skunks, and raccoons, from going through it or under it and having contact with the nonhuman primates. It must be of sufficient distance from the outside wall or fence of the primary enclosure to

prevent physical contact between animals inside the enclosure and outside the perimeter fence. Such fences less than 3 feet in distance from the primary enclosure must be approved by the Administrator. A perimeter fence is not required if:

(1) The outside walls of the primary enclosure are made of a sturdy, durable material such as concrete, wood, plastic, metal, or glass, and are high enough and constructed in a manner that prevents contact with or entry by humans and animals that are outside the sheltered housing facility; or

(2) The housing facility is surrounded by a natural barrier that restricts the nonhuman primates to the housing facility and protects them from contact with unauthorized humans and animals that are outside the sheltered housing facility, and the Administrator gives written permission.

(g) *Public barriers.* Fixed public exhibits housing nonhuman primates, such as zoos, must have a barrier between the primary enclosure and the public at any time the public is present, that prevents physical contact between the public and the nonhuman primates. Nonhuman primates used in trained animal acts or in uncaged public exhibits must be under the direct control and supervision of an experienced handler or trainer at all times when the public is present. Trained nonhuman primates may be permitted physical contact with the public, as allowed under § 2.131, but only if they are under the direct control and supervision of an experienced handler or trainer at all times during the contact.

§ 3.78 Outdoor housing facilities.

(a) *Acclimation.* Only nonhuman primates that are acclimated to the prevailing temperature and humidity at the outdoor housing facility during the time of year they are at the facility, and that can tolerate the range of temperatures and climatic conditions known to occur at the facility at that time of year without stress or discomfort, may be kept in outdoor facilities.

(b) *Shelter from the elements.* Outdoor housing facilities for nonhuman primates must provide adequate shelter from the elements at all times. It must provide protection from the sun, rain, snow, wind, and cold, and from any weather conditions that may occur. The shelter must provide heat to the nonhuman primates to prevent the ambient temperature from falling below 45° F (7.2° C), except as directed by the attending veterinarian and in

accordance with generally accepted professional and husbandry practices.

(c) *Capacity; multiple shelters.* The shelter must be sufficiently large to comfortably provide protection for each nonhuman primate housed in the facility. If aggressive or dominant animals are housed in the facility with other animals there must be multiple shelters, or other means to ensure protection for each nonhuman primate housed in the facility.

(d) *Perimeter fence.* An outdoor housing facility must be enclosed by a fence that is of sufficient height to keep unwanted species out. Fences less than 6 feet high must be approved by the Administrator. The fence must be constructed so that it protects nonhuman primates by preventing unauthorized humans, and animals the size of dogs, skunks, and raccoons from going through it or under it and having contact with the nonhuman primates. It must be of sufficient distance from the outside wall or fence of the primary enclosure to prevent physical contact between animals inside the enclosure and outside the perimeter fence. Such fences less than 3 feet in distance from the primary enclosure must be approved by the Administrator. A perimeter fence is not required if:

(1) The outside walls of the primary enclosure are made of a sturdy, durable material such as concrete, wood, plastic, metal, or glass, and are high enough and constructed in a manner that prevents contact with or entry by humans and animals that are outside the housing facility; or

(2) The housing facility is surrounded by a natural barrier that restricts the nonhuman primates to the housing facility and protects them from contact with unauthorized humans and animals that are outside the housing facility, and the Administrator gives written permission.

(e) *Public barriers.* Fixed public exhibits housing nonhuman primates, such as zoos, must have a barrier between the primary enclosure and the public at any time the public is present, in order to prevent physical contact between the public and the nonhuman primates. Nonhuman primates used in trained animal acts or in uncaged public exhibits must be under the direct control and supervision of an experienced handler or trainer at all times when the public is present. Trained nonhuman primates may be allowed physical contact with the public, but only if they are under the direct control and supervision of an experienced handler or trainer at all times during the contact.

§ 3.79 Mobile or traveling housing facilities.

(a) *Heating, cooling, and temperature.* Mobile or traveling housing facilities must be sufficiently heated and cooled when necessary to protect nonhuman primates from temperature extremes and to provide for their health and well-being. The ambient temperature in the traveling housing facility must not fall below 45 °F (7.2 °C) and must not rise above 95 °F (35 °C) when nonhuman primates are present. The ambient temperature must be maintained at a level that ensures the health and well-being of the species housed, as directed by the attending veterinarian, and in accordance with generally accepted professional and husbandry practices.

(b) *Ventilation.* Traveling housing facilities must be sufficiently ventilated at all times when nonhuman primates are present to provide for the health and well-being of nonhuman primates and to minimize odors, drafts, ammonia levels, moisture condensation, and exhaust fumes. Ventilation must be provided by means of windows, doors, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning, must be provided when the ambient temperature in the traveling housing facility is 85 °F (29.5 °C) or higher.

(c) *Lighting.* Mobile or traveling housing facilities must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the nonhuman primates. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed in the housing facility so as to protect the nonhuman primates from excessive light.

(d) *Public barriers.* There must be a barrier between a mobile or traveling housing facility and the public at any time the public is present, in order to prevent physical contact between the nonhuman primates and the public. Nonhuman primates used in traveling exhibits, trained animal acts, or in uncaged public exhibits must be under the direct control and supervision of an experienced handler or trainer at all times when the public is present. Trained nonhuman primates may be allowed physical contact with the public, but only if they are under the direct control and supervision of an experienced handler or trainer at all times during the contact.

§ 3.8 Primary enclosures.

Primary enclosures for nonhuman primates must meet the following minimum requirements:

(a) *General requirements.* (1) Primary enclosures must be designed and constructed of suitable materials so that they are structurally sound for the species of nonhuman primates contained in them. They must be kept in good repair.

(2) Primary enclosures must be constructed and maintained so that they:

(i) Have no sharp points or edges that could injure the nonhuman primates;

(ii) Protect the nonhuman primates from injury;

(iii) Contain the nonhuman primates securely and prevent accidental opening of the enclosure, including opening by the animal, and unauthorized release of the nonhuman primates;

(iv) Keep other unwanted animals and unauthorized individuals from entering the enclosure or having physical contact with the nonhuman primates;

(v) Enable the nonhuman primates to remain dry and clean;

(vi) Provide shelter and protection from extreme temperatures and weather conditions that may be uncomfortable or hazardous to the species of nonhuman primate contained;

(vii) Provide sufficient shade to shelter all the nonhuman primates housed in the primary enclosure at one time;

(viii) Provide the nonhuman primates with easy and convenient access to clean food and water;

(ix) Enable all surfaces in contact with nonhuman primates to be readily cleaned and sanitized in accordance with § 3.84(b)(3) of this subpart, or replaced when worn or soiled;

(x) Have floors that are constructed in a manner that protects the nonhuman primates from injuring themselves; and

(xi) Provide sufficient space for the nonhuman primates to make normal postural adjustments with freedom of movement.

(b) *Minimum space requirements.* Primary enclosures must meet the minimum space requirements provided in this subpart. These minimum space requirements must be met even if perches, ledges, swings, or other suspended fixtures are placed in the enclosure. Low perches and ledges will be counted as part of the floor space.

(1) The minimum space that must be provided to each nonhuman primate, whether housed individually or with other nonhuman primates, will be determined by the typical weight of animals of its species, except for

branchiating species and great apes,² and will be calculated by using the following table:³

Group	Weight		Floor area/animal		Height	
	lbs.	(kg.)	ft. ²	(m ²)	in.	(cm.)
1	Under 2.2	(Under 1)	1.6	(0.15)	20	(50.8)
2	2.2-6.6	(1-3)	3.0	(0.28)	30	(76.2)
3	6.6-22.0	(3-10)	4.3	(0.40)	30	(76.2)
4	22.0-33.0	(10-15)	6.0	(0.56)	32	(81.28)
5	33.0-55.0	(15-25)	8.0	(0.74)	36	(91.44)
6	Over 55.0	(Over 25)	25.1	(2.33)	84	(213.36)

(2) Dealers, exhibitors, and research facilities, including Federal research facilities, must provide great apes weighing over 110 lbs. (50 kg) an additional volume of space in excess of that required for group 6 animals as set forth in paragraph (b)(1) of this section, to allow for normal postural adjustments.

(3) Innovative primary enclosures not precisely meeting the floor area and height requirements provided in paragraph (b)(1) of this section, but that do provide nonhuman primates with a sufficient volume of space and the opportunity to express species-typical behavior, may be used at research facilities when approved by the Committee, and by dealers and exhibitors when approved by the Administrator.

(4) In the case of research facilities, any exemption from these standards must be required by a research proposal or the judgment of the attending veterinarian and must be approved by the Committee. In the case of dealers and exhibitors, any exemption from these standards must be required in the judgment of the attending veterinarian and approved by the Administrator.

(5) When more than one nonhuman primate is housed in a primary enclosure, the minimum space requirement for the enclosure is the sum of the minimum floor area space required for each individual nonhuman primate in the table in paragraph (b)(1) of this section, and the minimum height requirement for the largest nonhuman primate housed in the enclosure. *Provided, however,* That mothers with

infants less than 6 months of age may be maintained together in primary enclosures that meet the floor area space and height requirements of the mother.

§ 3.81 Environment enhancement to promote psychological well-being.

Dealers, exhibitors, and research facilities must develop, document, and follow a plan for environment enhancement adequate to promote the psychological well-being of nonhuman primates. Such plan must be in accordance with the currently accepted professional standards as cited in appropriate professional journals or reference guides, and as directed by the attending veterinarian. This plan must be made available to APHIS, and, in the case of research facilities, to officials of any pertinent funding agency. *Provided, however:* That the plan, as a minimum, must address each of the following:

(a) *Social grouping.* The environment enhancement plan must include specific provisions to address the social needs of nonhuman primates of species known to exist in social groups in nature. Such specific provisions must be in accordance with currently accepted professional standards, as cited in appropriate professional journals or reference guides, and as directed by the attending veterinarian. The plan may provide for the following exceptions:

(1) If a nonhuman primate exhibits vicious or overly aggressive behavior, or is debilitated as a result of age or other conditions (e.g., arthritis), it should be housed separately;

enclosure. Different species of primates vary in weight and should be grouped with their appropriate weight group. They have not been included in the weight table since different species typically fall into different weight groups. Infants and juveniles of certain species are substantially lower in weight than adults of those species and require the minimum space requirements of lighter weight species, unless the animal is obviously unable to make normal postural adjustments and movements within the primary enclosure.

² Examples of the kinds of nonhuman primates typically included in each age group are:

(2) Nonhuman primates that have or are suspected of having a contagious disease must be isolated from healthy animals in the colony as directed by the attending veterinarian. When an entire group or room of nonhuman primates is known to have or believed to be exposed to an infectious agent, the group may be kept intact during the process of diagnosis, treatment, and control.

(3) Nonhuman primates may not be housed with other species of primates or animals unless they are compatible, do not prevent access to food, water, or shelter by individual animals, and are not known to be hazardous to the health and well-being of each other. Compatibility of nonhuman primates must be determined in accordance with generally accepted professional practices and actual observations, as directed by the attending veterinarian, to ensure that the nonhuman primates are in fact compatible. Individually housed nonhuman primates must be able to see and hear nonhuman primates of their own or compatible species unless the attending veterinarian determines that it would endanger their health, safety, or well-being.

(b) *Environmental enrichment.* The physical environment in the primary enclosures must be enriched by providing means of expressing noninjurious species-typical activities. Species differences should be considered when determining the type of methods of enrichment. Examples of environmental enrichments include providing perches, swings, mirrors, and

Group 1—marmosets, tamarins, and infants (less than 6 months of age) of various species.

Group 2—capuchins, squirrel monkeys and similar sized species, and juveniles (6 months to 3 years of age) of various species.

Group 3—macaques and African species.

Group 4—male macaques and large African species.

Group 5—baboons and nonbranchiating species larger than 33.0 lbs. (15 kg.).

Group 6—great apes over 55.0 lbs. (25 kg.), except as provided in paragraph (b)(2) of this section, and branchiating species.

² The different species of nonhuman primates are divided into six weight groups for determining minimum space requirements, except that all branchiating species of any weight are grouped together since they require additional space to engage in species-typical behavior. The grouping provided is based upon the typical weight for various species and not on changes associated with obesity, aging, or pregnancy. These conditions will not be considered in determining a nonhuman primate's weight group unless the animal is obviously unable to make normal postural adjustments and movements within the primary

other increased cage complexities; providing objects to manipulate; varied food items; using foraging or task-oriented feeding methods; and providing interaction with the care giver or other familiar and knowledgeable person consistent with personnel safety precautions.

(c) *Special considerations.* Certain nonhuman primates must be provided special attention regarding enhancement of their environment, based on the needs of the individual species and in accordance with the instructions of the attending veterinarian. Nonhuman primates requiring special attention are the following:

- (1) Infants and young juveniles;
- (2) Those that show signs of being in psychological distress through behavior or appearance;
- (3) Those used in research for which the Committee-approved protocol requires restricted activity;
- (4) Individually housed nonhuman primates that are unable to see and hear nonhuman primates of their own or compatible species; and
- (5) Great apes weighing over 110 lbs. (50 kg). Dealers, exhibitors, and research facilities must include in the environment enhancement plan special provisions for great apes weighing over 110 lbs. (50 kg), including additional opportunities to express species-typical behavior.

(d) *Restraint devices.* Nonhuman primates must not be maintained in restraint devices unless required for health reasons as determined by the attending veterinarian or by a research proposal approved by the Committee at research facilities. Maintenance under such restraint must be for the shortest period possible. In instances where long-term (more than 12 hours) restraint is required, the nonhuman primate must be provided the opportunity daily for unrestrained activity for at least one continuous hour during the period of restraint, unless continuous restraint is required by the research proposal approved by the Committee at research facilities.

(e) *Exemptions.* (1) The attending veterinarian may exempt individual nonhuman primates from participation in the environment enhancement plan because of their health or condition, or in consideration of their well-being. The basis of the exemption must be recorded by the attending veterinarian for each nonhuman primate. Unless the basis for the exemption is a permanent condition, the exemption must be reviewed at least every 30 days by the attending veterinarian.

(2) For a research facility, the Committee may exempt certain

individual nonhuman primates from participation in some or all of the otherwise required environment enhancement plans for scientific reasons set forth in the research proposal. The basis of the exemption shall be documented in the approved proposal and must be reviewed at appropriate intervals as determined by the Committee, but not less than annually.

(3) Records of any exemptions must be maintained by the dealer, exhibitor, or research facility and must be made available to USDA officials of any pertinent funding Federal agency upon request.

Animal Health and Husbandry Standards

§ 3.92 Feeding.

(a) The diet for nonhuman primates must be appropriate for the species, size, age, and condition of the animal, and for the conditions in which the nonhuman primate is maintained, according to generally accepted professional and husbandry practices and nutritional standards. The food must be clean, wholesome, and palatable to the animals. It must be of sufficient quantity and have sufficient nutritive value to maintain a healthful condition and weight range of the animal and to meet its normal daily nutritional requirements.

(b) Nonhuman primates must be fed at least once each day except as otherwise might be required to provide adequate veterinary care. Infant and juvenile nonhuman primates must be fed as often as necessary in accordance with generally accepted professional and husbandry practices and nutritional standards, based upon the animals' age and condition.

(c) Food and food receptacles, if used, must be readily accessible to all the nonhuman primates being fed. If members of dominant nonhuman primate or other species are fed together with other nonhuman primates, multiple feeding sites must be provided. The animals must be observed to determine that all receive a sufficient quantity of food.

(d) Food and food receptacles, if used, must be located so as to minimize any risk of contamination by excreta and pests. Food receptacles must be kept clean and must be sanitized in accordance with the procedures listed in § 3.84(b)(3) of this subpart at least once every 2 weeks. Used food receptacles must be sanitized before they can be used to provide food to a different nonhuman primate or social grouping of nonhuman primates. Measures must be

taken to ensure there is no molding, deterioration, contamination, or caking or wetting of food placed in self-feeders.

§ 3.83 Watering.

Potable water must be provided in sufficient quantity to every nonhuman primate housed at the facility. If potable water is not continually available to the nonhuman primates, it must be offered to them at least twice daily for periods of at least 1 hour each time, unless otherwise required by the attending veterinarian, or as required by the research proposal approved by the Committee at research facilities. Water receptacles must be cleaned and sanitized in accordance with methods provided in § 3.84(b)(3) of this subpart at least once every 2 weeks or as often as necessary to keep them clean and free from contamination. Used water receptacles must be sanitized before they can be used to provide water to a different nonhuman primate or social grouping of nonhuman primates.

§ 3.84 Cleaning, sanitation, housekeeping, and pest control.

(a) *Cleaning of primary enclosures.* Excreta and food waste must be removed from inside each indoor primary enclosure daily and from underneath them as often as necessary to prevent an excessive accumulation of feces and food waste, to prevent the nonhuman primates from becoming soiled, and to reduce disease hazards, insects, pests, and odors. Dirt floors, floors with absorbent bedding, and planted areas in primary enclosures must be spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta, or as often as necessary to reduce disease hazards, insects, pests, and odors. When using water to clean the primary enclosure, whether by hosing, flushing, or other method, a stream of water must not be directed at a nonhuman primate. When steam is used to clean the primary enclosures, nonhuman primates must be removed or adequately protected to prevent them from being injured. Perches, bars, and shelves must be kept clean and replaced when worn. If the species of the nonhuman primates housed in the primary enclosure engages in scent marking, hard surfaces in the primary enclosure must be spot-cleaned daily.

(b) *Sanitization of primary enclosures and food and water receptacles.* (1) A used primary enclosure must be sanitized in accordance with this section before it can be used to house another nonhuman primate or group of nonhuman primates.

(2) Indoor primary enclosures must be sanitized at least once every 2 weeks and as often as necessary to prevent an excessive accumulation of dirt, debris, waste, food waste, excreta, or disease hazard, using one of the methods prescribed in paragraph (b)(3) of this section. However, if the species of nonhuman primates housed in the primary enclosure engages in scent marking, the primary enclosure must be sanitized at regular intervals determined in accordance with generally accepted professional and husbandry practices.

(3) Hard surfaces of primary enclosures and food and water receptacles must be sanitized using one of the following methods:

- (i) Live steam under pressure;
- (ii) Washing with hot water (at least 180 °F (82.2 °C)) and soap or detergent, such as in a mechanical cage washer;
- (iii) Washing all soiled surfaces with appropriate detergent solutions or disinfectants, or by using a combination detergent/disinfectant product that accomplishes the same purpose, with a thorough cleaning of the surfaces to remove organic material, so as to remove all organic material and mineral buildup, and to provide sanitization followed by a clean water rinse.

(4) Primary enclosures containing material that cannot be sanitized using the methods provided in paragraph (b)(3) of this section, such as sand, gravel, dirt, absorbent bedding, grass, or planted areas, must be sanitized by removing the contaminated material as necessary to prevent odors, diseases, pest, insects, and vermin infestation.

(c) *Housekeeping for premises.* Premises where housing facilities are located, including buildings and surrounding grounds, must be kept clean and in good repair in order to protect the nonhuman primates from injury, to facilitate the husbandry practices required in this subpart, and to reduce or eliminate breeding and living areas for rodents, pests, and vermin. Premises must be kept free of accumulations of trash, junk, waste, and discarded matter. Weeds, grass, and bushes must be controlled so as to facilitate cleaning of the premises and pest control.

(d) *Pest control.* An effective program for control of insects, external parasites affecting nonhuman primates, and birds and mammals that are pests, must be established and maintained so as to promote the health and well-being of the animals and reduce contamination by pests in animal areas.

§ 3.85 Employees.

Every person subject to the Animal Welfare regulations (9 CFR parts 1, 2,

and 3) maintaining nonhuman primates must have enough employees to carry out the level of husbandry practices and care required in this subpart. The employees who provide husbandry practices and care, or handle nonhuman primates, must be trained and supervised by an individual who has the knowledge, background, and experience in proper husbandry and care of nonhuman primates to supervise others. The employer must be certain that the supervisor can perform to these standards.

Transportation Standards

§ 3.86 Consignments to carriers and intermediate handlers.

(a) Carriers and intermediate handlers must not accept a nonhuman primate for transport in commerce more than 4 hours before the scheduled departure time of the primary conveyance on which the animal is to be transported. However, a carrier or intermediate handler may agree with anyone consigning a nonhuman primate to extend this time by up to 2 hours.

(b) Carriers and intermediate handlers must not accept a nonhuman primate for transport in commerce unless they are provided with the name, address, telephone number, and telex number, if applicable, of the consignee.

(c) Carriers and intermediate handlers must not accept a nonhuman primate for transport in commerce unless written instructions concerning in-transit food and water requirements for each nonhuman primate in the shipment are securely attached to the outside of its primary enclosure in a manner that makes them easily noticed and read.

(d) Carriers and intermediate handlers must not accept a nonhuman primate for transport in commerce unless the consignor certifies in writing to the carrier or intermediate handler that the nonhuman primate was offered food during the 12 hours and water during the 4 hours before delivery to the carrier or intermediate handler, and specifies the date and time the nonhuman primate was last offered food and water. A copy of the certification must accompany the nonhuman primate to its destination and must include the following information for each nonhuman primate:

- (1) The consignor's name and address;
- (2) The species of nonhuman primate;
- (3) A statement by the consignor certifying that each nonhuman primate contained in the primary enclosure was offered food during the 12 hours and water during the 4 hours before delivery to the carrier or intermediate handler, and the date and time food and water was last offered; and

(4) The consignor's signature and the date and time the certification was signed.

(e) Carriers and intermediate handlers must not accept a nonhuman primate for transport in commerce unless the primary enclosure meets the requirements of § 3.87 of this subpart, or the consignor certifies in writing to the carrier or intermediate handler that the primary enclosure meets the requirements of § 3.87 of this subpart. Even if the consignor provides this certification, a carrier or intermediate handler must not accept a nonhuman primate for transport if the primary enclosure is obviously defective or damaged and cannot reasonably be expected to safely and comfortably contain the nonhuman primate without suffering or injury. A copy of the certification must accompany the nonhuman primate to its destination and must include the following information for each primary enclosure:

- (1) The consignor's name and address;
- (2) The number of nonhuman primates contained in the primary enclosure;
- (3) The species of nonhuman primate contained in the primary enclosure;
- (4) A statement by the consignor certifying that each primary enclosure in the shipment meets the USDA standards for primary enclosures contained in § 3.87 of this subpart; and
- (5) The consignor's signature and the date the certification was signed.

(f) Carriers and intermediate handlers must not accept a nonhuman primate for transport in commerce unless their holding area and cargo facilities meet the minimum temperature requirements provided in §§ 3.90 and 3.91 of this subpart, or unless the consignor provides them with a certificate signed by a veterinarian and dated no more than 10 days before delivery of the animal to the carrier or intermediate handler for transport in commerce, certifying that the animal is acclimated to temperatures lower than those that are required in §§ 3.90 and 3.91 of this subpart. Even if the carrier or intermediate handler receives this certification, the temperatures the nonhuman primate is exposed to while in the carrier's or intermediate handler's custody must not be lower than the minimum temperature specified by the veterinarian in accordance with paragraph (f)(4) of this section, and must be reasonably within the generally and professionally accepted temperature range for the nonhuman primate, as determined by the veterinarian, considering its age, condition, and species. A copy of the certification must accompany the nonhuman primate to its destination and

must include the following information for each primary enclosure:

- (1) The consignor's name and address;
 - (2) The number of nonhuman primates contained in the primary enclosure;
 - (3) The species of nonhuman primate contained in the primary enclosure;
 - (4) A statement by a veterinarian that to the best of his or her knowledge, each of the nonhuman primates contained in the primary enclosure is acclimated to air temperatures lower than 45° F (7.2° C), but not lower than a minimum temperature specified on the certificate based on the generally and professionally accepted temperature range for the nonhuman primate considering its age, condition, and species; and
 - (5) The veterinarian's signature and the date the certification was signed.
- (g) When a primary enclosure containing a nonhuman primate has arrived at the animal holding area of a terminal facility after transport, the carrier or intermediate handler must attempt to notify the consignee upon arrival and at least once in every 6-hour period after arrival. The time, date, and method of each attempted notification and the actual notification of the consignee, and the name of the person who notifies or attempts to notify the consignee must be written on the carrier's or intermediate handler's copy of the shipping document and on the copy that accompanies the primary enclosure. If the consignee cannot be notified within 24 hours after the nonhuman primate has arrived at the terminal facility, the carrier or intermediate handler must return the animal to the consignor or to whomever the consignor designates. If the consignee is notified of the arrival and does not take physical delivery of the nonhuman primate within 48 hours after arrival of the nonhuman primate, the carrier or intermediate handler must return the animal to the consignor or to whomever the consignor designates. The carrier or intermediate handler must continue to provide proper care, feeding, and housing to the nonhuman primate, and maintain the nonhuman primate in accordance with generally accepted professional and husbandry practices until the consignee accepts delivery of the nonhuman primate or until it is returned to the consignor or to whomever the consignor designates. The carrier or intermediate handler must obligate the consignor to reimburse the carrier or intermediate handler for the cost of return transportation and care.

§ 3.87 Primary enclosures used to transport nonhuman primates.

Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must not transport or deliver for transport in commerce a nonhuman primate unless it is contained in a primary enclosure, such as a compartment, transport cage, carton, or crate, and the following requirements are met:

- (a) *Construction of primary enclosures.* Primary enclosures used to transport nonhuman primates may be connected or attached to each other and must be constructed so that:
 - (1) The primary enclosure is strong enough to contain the nonhuman primate securely and comfortably and to withstand the normal rigors of transportation;
 - (2) The interior of the enclosure has no sharp points or edges and no protrusions that could injure the animal contained in it;
 - (3) The nonhuman primate is at all times securely contained within the enclosure and cannot put any part of its body outside the enclosure in a way that could result in injury to the animal, or to persons or animals nearby;
 - (4) The nonhuman primate can be easily and quickly removed from the enclosure in an emergency;
 - (5) The doors or other closures that provide access into the enclosure are secured with animal-proof devices that prevent accidental opening of the enclosure, including opening by the nonhuman primate;
 - (6) Unless the enclosure is permanently affixed to the conveyance, adequate devices such as handles or handholds are provided on its exterior, and enable the enclosure to be lifted without tilting it, and ensure that anyone handling the enclosure will not come into physical contact with the animal contained inside;
 - (7) Any material, treatment, paint, preservative, or other chemical used in or on the enclosure is nontoxic to the animal and not harmful to the health or well-being of the animal;
 - (8) Proper ventilation is provided to the nonhuman primate in accordance with paragraph (c) of this section;
 - (9) Ventilation openings are covered with bars, wire mesh, or smooth expanded metal having air spaces; and
 - (10) The primary enclosure has a solid, leak-proof bottom, or a removable, leak-proof collection tray under a slatted or wire mesh floor that prevents seepage of waste products, such as excreta and body fluids, outside of the enclosure. If a slatted or wire mesh floor is used in the enclosure, it must be designed and constructed so that the

animal cannot put any part of its body between the slats or through the holes in the mesh. It must contain enough previously unused litter to absorb and cover excreta. The litter must be of a suitably absorbent material that is safe and nontoxic to the nonhuman primate and is appropriate for the species transported in the primary enclosure.

(b) *Cleaning of primary enclosures.* A primary enclosure used to hold or transport nonhuman primates in commerce must be cleaned and sanitized before each use in accordance with the methods provided in § 3.84(b)(3) of this subpart.

(c) *Ventilation.* (1) If the primary enclosure is movable, ventilation openings must be constructed in one of the following ways:

(i) If ventilation openings are located on two opposite walls of the primary enclosure, the openings on each wall must be at least 16 percent of the total surface area of each such wall and be located above the midline of the enclosure; or

(ii) If ventilation openings are located on all four walls of the primary enclosure, the opening on every wall must be at least 8 percent of the total surface area of each such wall and be located above the middle of the enclosure.

(2) Unless the primary enclosure is permanently affixed to the conveyance, projecting rims or similar devices must be located on the exterior of each enclosure wall having a ventilation opening, in order to prevent obstruction of the openings. The projecting rims or similar devices must be large enough to provide a minimum air circulation space of 0.75 inches (1.9 centimeters) between the primary enclosures and anything the enclosure is placed against.

(3) If a primary enclosure is permanently affixed to the primary conveyance so that there is only a front ventilation opening for the enclosure, the primary enclosure must be affixed to the primary conveyance in such a way that the front ventilation opening cannot be blocked, and the front ventilation opening must open directly to an unobstructed aisle or passageway inside of the conveyance. The ventilation opening must be at least 90 percent of the total area of the front wall of the enclosure, and must be covered with bars, wire mesh, or smooth expanded metal having air spaces.

(d) *Compatibility.* (1) Only one live nonhuman primate may be transported in a primary enclosure, except as follows:

(i) A mother and her nursing infant may be transported together;

(ii) An established male-female pair or family group may be transported together, except that a female in estrus must not be transported with a male nonhuman primate;

(iii) A compatible pair of juveniles of the same species that have not reached puberty may be transported together.

(2) Nonhuman primates of different species must not be transported in adjacent or connecting primary enclosures.

(e) *Space requirements.* Primary enclosures used to transport nonhuman primates must be large enough so that each animal contained in the primary enclosure has enough space to turn around freely in a normal manner and to sit in an upright, hands down position without its head touching the top of the enclosure. However, certain larger species must be restricted in their movements, in accordance with professionally accepted standards of care, when greater freedom of movement would be dangerous to the animal, its handler, or to other persons.

(f) *Marking and labeling.* Primary enclosures, other than those that are permanently affixed to a conveyance, must be clearly marked in English on the top and on one or more sides with the words "Wild Animals," or "Live Animals," in letters at least 1 inch (2.5 cm.) high, and with arrows or other markings to indicate the correct upright position of the primary enclosure.

Permanently affixed primary enclosures must be clearly marked in English with the words "Wild Animals" or "Live Animals," in the same manner.

(g) *Accompanying documents and records.* Shipping documents that must accompany shipments of nonhuman primates may be held by the operator of the primary conveyance, for surface transportation only, or must be securely attached in a readily accessible manner to the outside of any primary enclosure that is part of the shipment, in a manner that allows them to be detached for examination and securely reattached, such as in a pocket or sleeve.

Instructions for food and water and for administration of drugs, medication, and other special care must be attached to each primary enclosure in a manner that makes them easy to notice, to detach for examination, and to reattach securely.

§ 3.88 Primary conveyances (motor vehicle, rail, air, and marine).

(a) The animal cargo space of primary conveyances used to transport nonhuman primates must be designed, constructed, and maintained in a manner that at all times protects the health and well-being of the animals transported in it, ensures their safety

and comfort, and prevents the entry of engine exhaust from the primary conveyance during transportation.

(b) The animal cargo space must have a supply of air that is sufficient for the normal breathing of all the animals being transported in it.

(c) Each primary enclosure containing nonhuman primates must be positioned in the animal cargo space in a manner that provides protection from the elements and that allows each nonhuman primate enough air for normal breathing.

(d) During air transportation, the ambient temperature inside a primary conveyance used to transport nonhuman primates must be maintained at a level that ensures the health and well-being of the species housed, in accordance with generally accepted professional and husbandry practices, at all times a nonhuman primate is present.

(e) During surface transportation, the ambient temperature inside a primary conveyance used to transport nonhuman primates must be maintained between 45 °F (7.2 °C) and 85 °F (30 °C) at all times a nonhuman primate is present.

(f) A primary enclosure containing a nonhuman primate must be placed far enough away from animals that are predators or natural enemies of nonhuman primates, whether the other animals are in primary enclosures or not, so that the nonhuman primate cannot touch or see the other animals.

(g) Primary enclosures must be positioned in the primary conveyance in a manner that allows the nonhuman primates to be quickly and easily removed from the primary conveyance in an emergency.

(h) The interior of the animal cargo space must be kept clean.

(i) Nonhuman primates must not be transported with any material, substance (e.g., dry ice), or device in a manner that may reasonably be expected to harm the nonhuman primates or cause inhumane conditions.

§ 3.89 Food and water requirements.

(a) Each nonhuman primate that is 1 year of age or more must be offered food⁴ at least once every 24 hours. Each nonhuman primate that is less than 1 year of age must be offered food at least once every 12 hours. These time periods apply to dealers, exhibitors, and research facilities, including Federal research facilities, who transport nonhuman primates in their own primary conveyances, starting from the

time the nonhuman primate was last offered food before transportation was begun. These time periods apply to carriers and intermediate handlers starting from the date and time stated on the certification provided under § 3.86(d) of this subpart. Each nonhuman primate must be offered food within 12 hours before being transported in commerce. Consignors who are subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must certify that each nonhuman primate was offered food within the 12 hours preceding delivery of the nonhuman primate to a carrier or intermediate handler for transportation in commerce, and must certify the date and time of the feeding, in accordance with § 3.86(d) of this subpart.

(b) Each nonhuman primate must be offered potable water during the 4 hours immediately preceding the beginning of its transportation in commerce, and every 12 hours thereafter. This time period applies to dealers, exhibitors, and research facilities, including Federal research facilities, who transport nonhuman primates in their own primary conveyances, starting from the time the nonhuman primates was last offered potable water before being transported in commerce. This time period applies to carriers and intermediate handlers starting from the date and time stated on the certification provided under § 3.86(d) of this subpart. Consignors who are subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must certify that each nonhuman primate was offered potable water within 4 hours before being transported in commerce, and must certify the date and time the water was offered, in accordance with § 3.86(d) of this subpart.

(c) Any dealer, exhibitor, or research facility, including a Federal research facility, offering a nonhuman primate to a carrier or intermediate handler for transportation in commerce must securely attach to the outside of the primary enclosure used for transporting the nonhuman primate, written instructions for the in-transit food and water requirements of the nonhuman primate(s) contained in the enclosure. The instructions must be attached in a manner that makes them easily noticed, detached and returned to the enclosure.

(d) Food and water receptacles must be securely attached inside the primary enclosure and placed so that the receptacles can be filled from outside of the enclosure without opening the door. Food and water receptacles must be designed, constructed, and installed so that a nonhuman primate cannot leave

⁴ Proper food for purposes of this section is described in § 3.92 of this subpart, with the necessities and circumstances of the mode or travel taken into account.

the primary enclosure through the food or water opening.

§ 3.90 Care in transit.

(a) *Surface transportation (ground and water).* Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) transporting nonhuman primates in commerce must ensure that the operator of the conveyance or a person accompanying the operator of the conveyance observes the nonhuman primates as often as circumstances allow, but not less than once every 4 hours, to make sure that they have sufficient air for normal breathing, that the ambient temperature is within the limits provided in § 3.88(d) of this subpart, and that all other applicable standards of this subpart are being complied with. The regulated person transporting the nonhuman primates must ensure that the operator or the person accompanying the operator determines whether any of the nonhuman primates are in obvious physical distress, and obtains any veterinary care needed for the nonhuman primates at the closest available veterinary facility.

(b) *Air transportation.* During air transportation of nonhuman primates, it is the responsibility of the carrier to observe the nonhuman primates as frequently as circumstances allow, but not less than once every 4 hours if the animal cargo area is accessible during flight. If the animal cargo area is not accessible during flight, the carrier must observe the nonhuman primates whenever they are loaded and unloaded and whenever the animal cargo space is otherwise accessible to make sure that the nonhuman primates have sufficient air for normal breathing, that the ambient temperature is within the limits provided in § 3.88(d) of this subpart, and that all other applicable standards of this subpart are being complied with. The carrier must determine whether any of the nonhuman primates are in obvious physical distress, and arrange for any needed veterinary care for the nonhuman primates as soon as possible.

(c) If a nonhuman primate is obviously ill, injured, or in physical distress, it must not be transported in commerce, except to receive veterinary care for the condition.

(d) During transportation in commerce, a nonhuman primate must not be removed from its primary enclosure unless it is placed in another primary enclosure or a facility that meets the requirements of § 3.80 or § 3.87 of this subpart. Only persons who are experienced and authorized by the shipper, or authorized by the consignor or the consignee upon delivery, if the

animal is consigned for transportation, may remove nonhuman primates from their primary enclosure during transportation in commerce, unless required for the health or well-being of the animal.

(e) The transportation regulations contained in this subpart must be complied with until a consignee takes physical delivery of the animal if the animal is consigned for transportation, or until the animal is returned to the consignor.

§ 3.91 Terminal facilities.

(a) *Placement.* Any persons subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) must not commingle shipments of nonhuman primates with inanimate cargo or with other animals in animal holding areas of terminal facilities. Nonhuman primates must not be placed near any other animals, including other species of nonhuman primates, and must not be able to touch or see any other animals, including other species of nonhuman primates.

(b) *Cleaning, sanitization, and pest control.* All animal holding areas of terminal facilities must be cleaned and sanitized in a manner prescribed in § 3.84(b)(3) of this subpart, as often as necessary to prevent an accumulation of debris or excreta and to minimize vermin infestation and disease hazards. Terminal facilities must follow an effective program in all animal holding areas for the control of insects, ectoparasites, and birds and mammals that are pests of nonhuman primates.

(c) *Ventilation.* Ventilation must be provided in any animal holding area in a terminal facility containing nonhuman primates by means of windows, doors, vents, or air conditioning. The air must be circulated by fans, blowers, or air conditioning so as to minimize drafts, odors, and moisture condensation. Auxiliary ventilation, such as exhaust fans, vents, fans, blowers, or air conditioning, must be used in any animal holding area containing nonhuman primates when the ambient temperature is 75 °F (23.9 °C) or higher.

(d) *Temperature.* The ambient temperature in an animal holding area containing nonhuman primates must not fall below 45 °F (7.2 °C) or rise above 85 °F (29.5 °C) at any time nonhuman primates are present. The ambient temperature must not rise above 75 °F (23.9 °C) for more than four consecutive hours at any time nonhuman primates are present. The ambient temperature must be measured in the animal holding area by the carrier, intermediate handler, or a person transporting nonhuman primates who is subject to the Animal Welfare regulations (9 CFR

parts 1, 2, and 3), outside any primary enclosure containing a nonhuman primate at a point not more than 3 feet (0.91 m.) away from an outside wall of the primary enclosure, on a level that is even with the enclosure and approximately midway up the side of the enclosure.

(e) *Shelter.* Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) holding a nonhuman primate in an animal holding area of a terminal facility must provide the following:

(1) *Shelter from sunlight and extreme heat.* Shade must be provided that is sufficient to protect the nonhuman primate from the direct rays of the sun.

(2) *Shelter from rain or snow.* Sufficient protection must be provided to allow nonhuman primates to remain dry during rain, snow, and other precipitation.

(f) *Duration.* The length of time any person subject to the Animal Welfare regulations can hold a nonhuman primate in an animal holding area of a terminal facility upon arrival is the same as that provided in § 3.86(g) of this subpart.

§ 3.92 Handling.

(a) Any person subject to the Animal Welfare regulations (9 CFR parts 1, 2, and 3) who moves (including loading and unloading) nonhuman primates within, to, or from the animal holding area of a terminal facility or a primary conveyance must do so as quickly and efficiently as possible, and must provide the following during movement of the nonhuman primate:

(1) *Shelter from sunlight and extreme heat.* Sufficient shade must be provided to protect the nonhuman primate from the direct rays of the sun. A nonhuman primate must not be exposed to an ambient temperature above 85 °F (29.5 °C) for a period of more than 45 minutes while being moved to or from a primary conveyance or a terminal facility. The ambient temperature must be measured in the manner provided in § 3.91(d) of this subpart.

(2) *Shelter from rain or snow.* Sufficient protection must be provided to allow nonhuman primates to remain dry during rain, snow, and other precipitation.

(3) *Shelter from cold temperatures.* Transporting devices on which nonhuman primates are placed to move them must be covered to protect the animals when the outdoor temperature falls below 45 °F (7.2 °C). A nonhuman primate must not be exposed to an ambient air temperature below 45 °F (7.2 °C) for a period of more than 45 minutes,

unless it is accompanied by a certificate of acclimation to lower temperatures as provided in § 3.86(f) of this subpart. The ambient temperature must be measured in the manner provided in § 3.91(d) of this subpart.

(b) Any person handling a primary enclosure containing a nonhuman primate must use care and must avoid causing physical harm or emotional distress to the nonhuman primate.

(1) A primary enclosure containing a nonhuman primate must not be placed on unattended conveyor belts or on elevated conveyor belts, such as baggage claim conveyor belts and

inclined conveyor ramps that lead to baggage claim areas, at any time; except that a primary enclosure may be placed on inclined conveyor ramps used to load and unload aircraft if an attendant is present at each end of the conveyor belt.

(2) A primary enclosure containing a nonhuman primate must not be tossed, dropped, or needlessly tilted, and must not be stacked in a manner that may reasonably be expected to result in its falling. It must be handled and positioned in the manner that written instructions and arrows on the outside of the primary enclosure indicate.

(c) This section applies to movement of a nonhuman primate from primary conveyance to primary conveyance, within a primary conveyance or terminal facility, and to or from a terminal facility or a primary conveyance.

Done in Washington, DC, this 10th day of August 1990.

James W. Glosser,

Administrator, Animal and Plant Health
Inspection Service.

[FR Doc. 90-19223 Filed 8-14-90; 8:45 am]

BILLING CODE 3410-34-m